



# SCHOOL LIFE

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## OBJECTIVES IN ELEMENTARY RURAL-SCHOOL AGRICULTURE

**Program Designed Specifically to Keep Boys on Farm Can Not Be Justified—No Danger of Disaster Through Failure of Food Supply Following Migration to Cities—Farm Production Increasing More Rapidly Than Population—Adequate Picture of Agriculture Is Required.**

By EUSTACE E. WINDES,  
*Assistant in Rural Education, Bureau of Education.*

Vocational guidance, appreciation of nature, adaptation to a rural environment, introduction to the essential technical knowledge and manipulative skills in the important agricultural vocations, and motivation of other subjects of the elementary school curriculum are the major objectives in rural elementary-school agriculture.

Past effort in elementary agriculture has not been directed, in many cases, toward definitely formulated ends. In so far as any definiteness of ends has been apparent, those of so educating as to give rural boys and girls a bias toward the farm and of educating in the application of science to agricultural production, have been dominant. A realization of either, or both of these objectives would mean simply that rural-life problems were intensified.

There is no escaping the fact that to increase the number of workers in agricultural vocations without providing compensatory markets would serve to increase competition within the agricultural group and make the struggle for existence keener where it is already acute. This fact has always been recognized not only by students of rural problems, but also by propagandists who preach without studying. The "Back to the farm" slogan has been justified because men observed the fact of an ever-increasing percentage of urban dwellers over rural dwellers and feared national disaster because of a failure of the home food supply.

(Continued on page 108.)

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## IMPROVEMENT IN METHODS OF COLLEGE TEACHING

**Courses in Education for Undergraduates Who Expect to Become College Teachers—Short Intensive Courses by Specialists in Education—Voluntary Seminars, with Observation of Teaching and Suggestion—Consultation of Young Instructors with Experienced Professors.**

By W. W. CHARTERS,  
*Professor of Education, Carnegie Institute of Technology.*

[Read before the Department of Home Economics, Association of Land-Grant Colleges.]

I ask you to consider with me to-day the problem of training college teachers. In my presentation of the case I shall have little to say concerning general theories because I prefer to base my observations upon a few important studies that have been conducted here and there.

There are in general three lines along which improvement of methods of college teaching are proceeding. The first of these is the provision for undergraduate courses in education for those who expect to teach in college. Occasionally these courses are offered in the graduate school. A second method that is commonly used is a short intensive course for a week during the year during which a specialist in education discusses problems of college teaching with the staff and in consultation with them prepares a program for consideration during the year by the college faculty committee on instruction. The third method which I

shall discuss at some length is the training of teachers on the job through weekly conferences and observation of their teaching.

As a basis for my discussion, which I can summarize in a short statement of methods at the end, I shall describe a project which we have been carrying on at Carnegie Institute of Technology for the past three years.

When I became connected with the institution I found that in the four divisions of engineering, industries, fine arts,

and the women's college, there were a number of teachers on the faculty who had not had any sort of specific and formal training in methods of teaching. We found also that while many of the experienced teachers had worked out excellent methods of teaching by themselves, the younger group of inexperienced teachers could be benefited by some sort of formal training. This led us to propose a voluntary seminar to last for a semester and meet once a week.

#### Little Published on College Teaching Methods.

We were at once faced with the problem of what to include within the course. I knew a good deal about elementary and high school methods but little had been collected or published about methods of college teaching. In this situation we fell back upon the idea of job analysis. The instructors who enrolled for the seminar were asked to make a list of their duties as teachers and to indicate those with which they had the greatest difficulty. As a result of this analysis during the first semester we obtained a list of 14 practical difficulties, such as the methods of grading papers and grading students; methods of apportioning the work to the time so that the material would not run out before the end of the hour or before the end of the semester; methods of getting the interest of students; and of getting them to work hard. It will be noted that these are very real and vital problems which the young instructor actually faced and upon which he was looking for aid.

#### Experience Has Produced Excellent Methods.

At this point I had a mild inspiration. If you have ever worked in a department of education you know that the instructors in subjects outside of education are likely to view you with suspicion. They are inclined to ask themselves subconsciously, "What does Mr. Charters know about teaching my subject since in all probability he has not had even an elementary course in it." The student instructors are likely to ask the same question which becomes a real obstacle in getting motivation. To obviate this difficulty I said to myself, "There are on this faculty a number of very excellent teachers. They have never had any formal courses in education but during their 5 or 10 or 15 or 20 years of experience they have worked out a number of excellent methods. They are men of ability and when they meet difficulties in teaching they solve them with intelligence. On the other hand there is nothing in the books about college teaching and my best line of procedure is to find out how the excellent teachers on

the faculty handle these specific difficulties which the young instructors in my seminar are facing."

I therefore trained these young men and women to become interviewers. We selected 30 good teachers on the faculty and had each of them interviewed by one of the group to find out how they handled the 14 difficulties with which the young people were having trouble.

This proved to be an excellent suggestion for three reasons. In the first place possible criticism of the course was forestalled because the education department did not seek to dictate methods of teaching subjects, it merely collected and interpreted the best methods that were in use. In the second place we discovered a body of methods that was more than respectable; it was fine. Many of the methods used had not appeared in print and were unknown to the instructor. One might say that some of the instructors were unconscious of some of the important problems of teaching. It is sometimes claimed by those who do not know that all college teachers merely lecture and have no discussions; that they are formal and not practical. But among the people that were selected we found a great many who were using all the latest methods which are being described in educational literature. We found, for instance, that the project about which we have heard so much to-day was used by many instructors. The electrical engineering department was taking old machines, disconnecting them, and asking the students to put them together so that they would run. In the performance of this operation they learned a great deal about electricity by the project method.

#### Seasoned Professors Willing to Assist.

In the third place the young instructors were brought into close personal contact with the more experienced instructors. They found that the older teachers were very willing to be interviewed. The shortest interview was one hour, the median an hour and a half, and the longest five hours with the interviewer prostrated and the instructor still going strong. The members of the seminar told me over and over again that this opportunity to have a heart to heart talk with older instructors whom they would not otherwise have had the temerity to approach was the best single value in the course.

When the 30 replies to each difficulty were collected they were organized into a pamphlet which was mimeographed and used in the seminar. It was later handed down to succeeding groups as the contribution of the first group.

The second group provided as their contribution an analysis of the difficulties of getting students to think. These in-

cluded such difficulties as locating problems, gathering data, finding and weighing hypotheses, methods of verification, intelligence in thinking, and teaching of scientific terminology.

One very interesting fact was revealed. I think it is correct. It appears that in the inductive sciences, such as chemistry and physics for example, there is less opportunity to train people in the processes of reasoning than there is in some of the less exact sciences. It seems peculiar that in these sciences that have been developed upon the basis of inductive reasoning this should be the case, and yet upon further consideration the reason is clear. In the complete act of thought the individual has to locate problems, guess at solutions, elaborate them, and verify them. In physics, for example, the technique of investigation is so refined and the equipment so elaborate that it is not possible for all the principles to be developed inductively. As a consequence, the students are given the principles and are merely asked to verify them. They are only occasionally able to discover them. In sociology, on the other hand, which is one of the more indefinite subjects, it is possible to give a great deal more practice in reasoning. A student can collect the data, form hypotheses, elaborate them, and verify or discard them. Since the procedure is not so refined as in the exact sciences, it is more nearly within the student's ability, and he is therefore able to find more problems which will give him the opportunity to make intelligent guesses and pursue them to their final outcome.

In the third year the students had at hand the organizer reports of the two preceding groups and proceeded to an analysis of the difficulties encountered in shop and laboratory teaching. At the end of the semester they had gathered through the interviews a number of methods used on the campus.

#### Weekly Meetings Are Valuable.

I propose some such method for the heads of the departments in home economics. It is an excellent thing to have undergraduate courses given; it is valuable to provide intensive courses for a short period; but it is extremely valuable to have a weekly meeting with the young instructors who have had no experience in teaching. They should be gathered in a group of two, three, five, or more, as the case may be, and with them may be used the methods which I have described. A difficulty analysis can be made and this may furnish the topics for discussion one week after another until they have all been touched.

It is not necessary to depend entirely upon interviews. The literature of

(Continued on page 113.)



## LESSONS ON THE CENTRALIZATION MOVEMENT FROM OKLAHOMA

**Plan of Consolidation to Embrace Entire County is Prepared Before  
Any Consolidation is Encouraged—People Inclined to Favor  
County-Wide Arrangements—Consolidation Not Recommended in  
All Cases—Centralization May Take Place in Three Ways.**

By KATHERINE M. COOK,

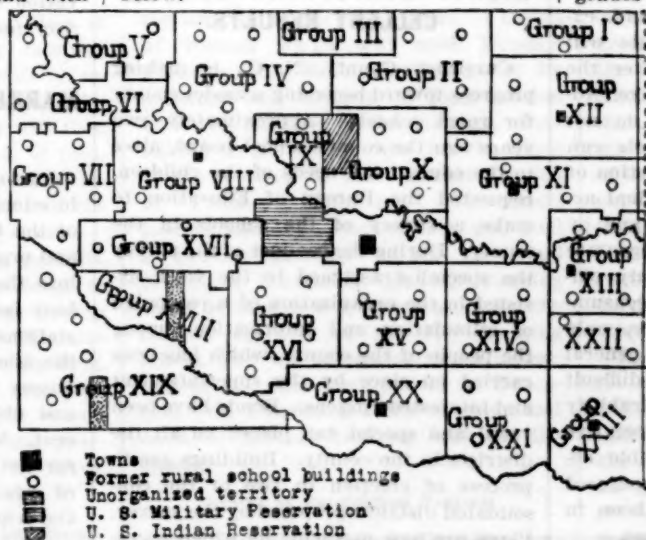
*Specialist in Rural Education, Bureau of Education.*

States, like individuals, are never too old to learn. Oklahoma, the youngest State in the Union, contributes some valuable suggestions in methods of procedure in the promotion of the centralization movement among rural communities.

Oklahoma is one of those States in which the district is the unit of school organization. Centralization can take place only by a majority vote of each of the districts which are to make up the centralized unit and, under certain conditions, through annexation of territory. Like other States in which these conditions prevail there is grave danger that centralization will begin and end with the progressive districts; that enthusiasm in pushing the movement in such districts will result in the formation of districts with insufficient valuation for adequate support; that a few over-conservative and reactionary districts or persons will indefinitely delay the centralization program of a large group, and that the plan accepted will result in leaving out isolated strips of territory which can not later come into any centralization district.

In order to avoid these pitfalls to as great an extent as possible Oklahoma endeavors to promote the adoption of a same county-wide plan before any schools are consolidated or centralized. For some years there were in the State two rural school supervisors. Recently the legislature cut the appropriation so that there is now but one. They devoted a great deal of their time, in fact for a few years almost exclusively, to assisting the county superintendents to arouse interest among the people and to materialize plans for centralizing the schools. One or both of the supervisors visited the county, assisted the superintendent with a county-wide survey, investigat-

ing the topography, roads, size and valuation of districts, residence and age of children, school sites, present school facilities, etc. The county was then tentatively divided into centralized districts; and in making the division the effort was to consider financial ability, physical and topographical conditions, and children to be educated in the county as well as in the districts formed. After all possible desirable adjustments and harmonizations were made, maps of the county were prepared for further study and for general inspection and distribution. One of these maps prepared for one county is shown in the figure below.



PROPOSED CENTRALIZED SCHOOL DISTRICTS IN CANADIAN COUNTY, OKLA.  
Group VI was consolidated in 1911 and Groups VII and XX in 1920. Group XXIII was made a union graded district in 1920 and consolidated in 1921.

As soon as the whole plan was ready for definite discussion it was placed before the people of the county. A systematic campaign of publicity was organized, the maps were shown on slides and charts, meetings were held in the schoolhouses and elsewhere, and the press and other interests enlisted to promote understanding and appreciation of the county-wide plan as well as to secure its approval by the people. Not

all districts were urged to centralize at the time the campaign was made, but the plan as a whole was presented as a future policy for the county. The aim was to promote a general idea of consolidation on a county-wide scale. Particular individual consolidations would, it was believed, take care of themselves later if the big idea once got across.

### Consolidated Districts Furnish Transportation.

In fact, consolidation, especially as the term is understood in Oklahoma terminology, was not always even advocated in carrying out the proposed policy. Centralization takes place in this State in three ways: First, by the formation of independent districts which include rural territory and furnish transportation; second, through consolidation; and third, through the formation of union graded districts. The State law recognizes four kinds of districts: Ungraded rural, union graded, consolidated, and independent. The first includes small rural schools, mostly one and two teacher schools; the second, such districts as desire to centralize and may look forward to consolidation in the future but which have not sufficient valuation or territory to make it feasible as a present policy; bad roads may also contribute to this condition. The schools of union graded districts are centralized for the upper grades and usually one or more high school grades. As a rule transportation is not furnished at district expense. In the third group are districts properly called consolidated. In these the schools are centralized on a larger scale, transportation is furnished at district expense in most cases, and high-school courses, usually full four years, are offered. Independent districts are those which have a fully accredited four-year high school located in an incorporated town. They may be the result of centralization or annexation, or both.

Union graded districts develop into consolidated districts. Consolidated districts located in villages grow into independent districts. Sometimes villages grow up around the consolidated school or become independent districts through increase in size after centralization takes place. The tendency of districts of both kinds to evolve into the next higher class is common. This is shown by the following figures from the State superintendent's biennial report:

Districts organized as consolidated or union graded which reported as independent districts:

Year.	Consolidated.	Union graded.	Total.
1919.....	46	4	50
1921.....	61	9	70
1922.....	78	10	88

The county centralization plan, then, while formulated to promote consolidation, does not necessarily advocate it for all districts or as an immediate policy. Sometimes any centralization is discouraged; again, it may be expedient to form union graded districts first, or certain annexations to consolidated districts already formed may be desirable. The aim of the campaign is that the people think in terms of a county wide plan, that the advantages of centralization be well understood, and that mistakes which commonly occur under laws such as those referred to are avoided in as many instances as possible.

#### County-Wide Plan Increases Objections.

It will be apparent to persons experienced in advocating centralization of rural schools that this procedure may result in increasing the number of objections raised. Community differences may wreck any plan however carefully worked out before its submission. This occurs whether the plan be county wide or one which embraces two, three, or more districts. On the other hand, excellent suggestions and arguments will be made by the people even after the plan reaches the public-meeting stage. Adjustment of boundaries which do not jeopardize the good of the whole can and should be made at the suggestion of the people. However, after its final acceptance by the school officials and by reasonable popular approval changes are discouraged and State and county officials promote and assist in the consummation of those centralizations only whose boundaries conform to the general plan. It has not apparently been difficult to convince the people of the desirability of proceeding on this county cooperative basis; at least, no insurmountable obstacles appear to have been encountered in the State, for the plan has been in successful operation for some time.

#### Not a Panacea for All Evils.

Naturally, there are some objectionable features which this plan does not eliminate, nor does it offer a panacea for overcoming all the ills which beset county superintendents and other school officers who desire to encourage school centralization, but who realize that direction, as well as stimulation, of the movement is essential. That the movement for centralizing rural schools be a popular one and be stimulated as much as is consist-

ent with the present and future welfare of rural children is a consummation devoutly to be wished. It is, however, true that consolidations are springing up in many instances without due foresight and consideration of the ultimate good.

Centralization alone does not insure good schools. It merely sets the stage so that good schools are possible. Sound administrative practice, adequate support, and good teaching are still of primary importance. If these are neglected mere stimulation of the movement will not result in educational returns on the investment. Even now some signs of reaction are apparent against the centralization movement in several instances in which consolidation has failed fully to realize its promise. There is constantly increasing need for intelligent direction of the movement over a territory larger than that covered by small groups of schools or communities; for the study and application of administrative policies adapted to the special needs of rural consolidated schools, and for renewed emphasis on the age-old question of securing high-grade instruction. These are among the important considerations which should engage the attention of rural people and education officials.

#### COUNTY SURVEY PRODUCES EXCELLENT RESULTS.

Currituck County, N. C., is making progress toward becoming a model county for rural schools. Approximately two years ago the county school board, alive to the educational needs of the children, requested the Bureau of Education to make a survey of the schools in the county. During the conduct of the survey the specialist assigned to the work assisted in the organization of a campaign of stimulation and information among the people of the county, which has been carried on since by the superintendent and interested citizens. Bonds have been voted and special tax placed on all the districts in the county. Buildings are in process of erection in two of the consolidated districts proposed by the survey. Plans are now maturing by which necessary money for the buildings needed in the other proposed consolidations will be secured. Other plans approved by the board and the superintendent will result in securing the supervisors recommended in the survey report; and reorganization on the 6-3-3 plan as suggested is gradually being put into operation. It is believed that within a few years the complete plan recommended by the Bureau of Education for furnishing modern school facilities to all the children of the county will be carried out.

#### PREVENTION OF BLINDNESS DEMANDS ATTENTION.

At its eighth annual meeting, held November 23, 1922, in the Russell Sage Foundation Building, New York, the National Committee for the Prevention of Blindness adopted the following resolution:

"Whereas there are on all sides evidences of the fact that the eyes of children in both elementary and secondary schools are not being properly safeguarded,

"Therefore be it hereby resolved, that a communication be sent to the United States Commissioner of Education, the National Education Association, and to the various State superintendents of schools calling their attention to the need for the following improvements:

"a. Adequate lighting, both natural and artificial, to avoid eye strain.

"b. A more careful examination of the eyes of pupils, to determine defects of vision and the presence of disease.

"c. The establishment of conservation of vision classes for children with such seriously defective vision that they can not be properly educated, as are normally sighted pupils.

"d. The training of all persons preparing to be teachers in the hygiene of the eye, with special reference to the conservation of vision."—Winifred Hathaway, Secretary.

#### MARKED REDUCTION IN PORTO RICO'S ILLITERACY.

Porto Rico has been making progress in education since it became a Territory of the United States. Health education and organized play have been introduced into the schools, school athletic leagues have been organized, and infant welfare stations established in various parts of the island. Illiteracy has been reduced among the population 10 years of age and older from 80 per cent to 55 per cent. Much remains to be done, however, for not more than half of the children of school age can be accommodated by the school facilities of the island.

To raise scholarship standards in the Kansas State Agricultural College a point system for grading the work of students has been adopted. Points are granted according to the rating the student receives, somewhat as in track athletics points are granted for first, second, or third place. Four letters are given, E, G, M, and P, counting 3, 2, 1, and 0, respectively. For graduation the total requirement in points is the same as the requirement in credits.



## CLEVELAND MEETING OF SUPERINTENDENTS

### Financial Problems Prominent Among Subjects to Be Dis- cussed—Apparent Tendency to Retrenchment Causes Concern— Affiliated Organizations Meet.

Problems of finance and of the curriculum will be the main subjects discussed at the annual meeting of the Department of Superintendence of the National Education Association, which will be held at Cleveland, February 24 to March 2. In the study of financial problems which will take place on Tuesday morning, the 27th, it is planned to show the progress which has been made since the Chicago meeting. Some facts from the educational finance inquiry will be presented, and the superintendents will discuss the tax problem in financing public education. What the schools do in relation to what they cost will be taken up and a symposium held on budget making and spending.

#### Will Consider Reorganization of Curriculum.

The curriculum will be the subject of discussion at the Wednesday morning meeting, and the first study will be on saving time through the curriculum. Reorganization of the curriculum will then be considered, first on the basis of projects, then on the basis of individual instruction, and lastly on the basis of the requirements of the platoon system.

English composition, its aims, methods, and measurement, will be considered at the first meeting of the National Society for the Study of Education. This discussion will be based on a paper by Prof. Earl Hudelson, published in the 1923 yearbook of the society. At the second meeting another paper from the yearbook, "The social studies," by Prof. Harold O. Rugg, will be taken up.

#### Kindergarten Supervisors Discuss Objectives.

Kindergarten objectives which may be measured in terms of the modern elementary school will be studied by the Council of Kindergarten Supervisors and Training Teachers at its afternoon session on Tuesday. Further discussion will be held on these objectives and how they may be built upon in the lower grades. New objectives in training teachers for the kindergartens of to-day will then be taken up by the council.

Whether high-school inspectors should oppose, encourage, or ignore the tend-

ency in some communities toward financial retrenchment in school support will be discussed at a round-table conference of the National Association of High-School Inspectors and Supervisors. At the regular session committees will report on the determination of high-school levels of pupil attainment, on the number of tests to be undertaken and the method of attacking them, on the kind of tests to be used. Reports will be presented on school finance, on school planning, and on the cooperation of other organizations with the association.

#### Discuss Administration of Public Education.

The National Association of Secondary-School Principals will join the rural and elementary-school principals in a discussion on administering public education in the interests of the child and the State. At other sessions the secondary-school principals will give their opinions on such subjects as educational guidance, grouping of pupils according to tests, moral training, the place of the junior high school, overcrowded buildings, and secondary-school objectives. Three round-table sessions will be held to study the junior high school, the small high school, and the large high school.

How educational institutions can meet the present social demand for leaders of moral power will be considered at one of the sessions of the Department of Deans of Women which will meet Monday, Tuesday, and Wednesday. One of its meetings will be held in joint session with the Bureaus of Occupations. Promotion requirements will be the topic at the meeting of the National Council of Primary Education. Cleveland's teacher training school section will hold a two-day meeting in the Cleveland School of Education, Monday morning being devoted to a symposium of the distinctive features of the city training school, and the afternoon to an inspection of the Cleveland School of Education. On Tuesday practice teaching and costs of teacher training will be discussed.

#### Exhibit of Rural-School Progress.

The National Council of Education has arranged three sessions, to take place on Tuesday, Wednesday, and Thursday afternoons. An exhibit of progress in rural schools is to be made by the Department of Rural Education. Other associations which will meet during the week are the Department of Elementary School Principals, the Educational Research Association, the Department of Vocational Education and Practical Arts, the National Society of College Teachers of Education, and the National Council of State Departments of Education.

## WILL BROADCAST EDU- CATIONAL INFORMATION

### Radio Laboratory Near Arlington, Va., Will Cooperate with Bureau of Education—Messages Twice a Week—Comment Upon Service Is Requested.

To reach the general public as well as school workers with educational information and to spread it promptly, cheaply, and widely, the United States Bureau of Education sends out messages twice a week from NAA, the naval aircraft station at Radio, near Arlington, Va., on a wave length of 710 meters. The messages are sent on Monday and Thursday evenings from 6.45 to 7.

Readers of SCHOOL LIFE who hear any of the talks are urged to write to the Commissioner of Education and to comment upon the material presented and upon its form. Tell him whether you derived any benefit.

The first of the radio talks was given on December 7, the subject being the economic loss due to illiteracy. Later messages discussed the money value of education, visual aids to education, the necessity of education in a democracy, the work of the Bureau of Education in Alaska, and the shortage of school buildings. The Bureau of Education has started this service because it is the duty of the bureau to reach not only technical experts but also the general public, and it is the opinion of Dr. John J. Tigert, United States Commissioner of Education, that the public can be reached more quickly and directly by radio than in any other way.

Radio has the advantage of intimate contact between speaker and audience, and since the bureau's messages will be sent on a regular schedule, they will have the continuity necessary for informing the public on educational matters. Since public education can not progress any faster than the state of public opinion about education, the commissioner believes that the inauguration of radio is an important step in advance. Newspapers in California and Washington have requested permission to broadcast the bureau's messages to the Pacific Coast States, since the Anacostia radio reaches only to the Mississippi River.

Such subjects as the combating of illiteracy, the consolidation of rural schools, health work in the schools, and Americanization will probably be taken up in future messages.

## RAISE OBJECTION TO RELIGIOUS TEACHING

**Pupils, Parents, and Teachers of Trieste Object to Compulsory Instruction in Religion—Consider it Reimposition of a Form of Austrian Oppression.**

From report of RICHARD G. MONGES, American Vice Consul, Trieste, Italy.

The public schools of Trieste and Venezia Giulia, scheduled to reopen on October 2, encountered a serious agitation at the outset, which developed into a strike on the part of the students, supported by their parents and countenanced to a large degree by the teachers. Committees from the students' association were received by the Sindaco of Trieste, and later by the governor, who professed himself to be personally favorable to their claims, and to have made representation several times on their behalf to the ministry of public instruction in Rome. In deference to the attitude of the authorities, the students decided to suspend agitation for several days, awaiting some decision from Rome, and the following day classes proceeded as usual.

### Scholastic Program Retains Austrian Characteristics.

The strike is the outcome of a long period of discontent due to the fact that while the new Provinces have been largely assimilated by Italy, the scholastic program has remained Austrian.

This incident, unimportant in itself, has a political significance, and is the outcropping of the old problem, of the complete assimilation of the Province into the Italian Kingdom. Putting to one side such phases of the problem (as of local interest) as the varying age limits during which instruction, if given here and in the rest of Italy, the existence of certain classes of schools, largely for feminine instruction, which have no counterpart in the old Provinces, questions of examinations, grading, and the non-existence of certain degrees and licenses in one or another of the schools, there remains the very pressing question of religious instruction in the schools.

Under the Austrian system, the teaching of religion was obligatory, whereas this is not the case under Italian school programs. Consequently, a great deal of trouble has been caused by the attempt on the part of Italian clergy, in the new Provinces, to reimpose this form of

"Austrian oppression" upon the yielding and unformed consciousness of the children. Thus it is that in the Trentino the priest forms an integral part of the school, and in Istria, notably at Parenzo, all classes commence with prayer, as was done in Austria up to 30 years ago. In addition to the religious side of the question (about which it is so easy to create varying emotions), there is also the natural desire on the part of students and their parents to receive the same treatment from the Government that is accorded the scholars and parents of any other Italian community.

### Claims Right to Refuse Religious Teaching.

The following is a resolution voted and made public by the local section of the Italian National Association, "Giordano Bruno:"

"The school committee reminds all those who have children that frequent the public schools that they will be in their rights in insisting that their children be permitted to absent themselves from classes in religious instruction. The committee recalls to all parents who would give their children a truly Italian education that they should declare themselves opposed to seeing the very worst ordinances of destroyed Austria restored, and that the people of Trieste demand the same program for their children that obtains throughout the rest of the Kingdom."

## NORMAL SCHOOL AIDS RURAL-SCHOOL OFFICERS.

Rural-school extension work has been established by the Kansas State Normal School at Emporia as part of its regular extension program. This school has long been known for its experimental work with education achievement tests. It appears possible that the new extension division for extending the consolidation movement will have at least an equal effect in extending the name and fame of the institution. This division places at the disposal of rural people and school officers the services of several instructors in the rural department, an abundance of informational literature, and the possibility of securing musical and other attractions from the school. A manufacturing company has donated the use of a model transportation truck so that speakers and entertainers may be conveyed from the institution to the rural districts without undue expenditure of time and money. The Emporia institution is setting a lively pace which other extension and rural departments may well look to for suggestions and leadership in promoting better rural schools.—K. M. Cook.

## NEW PLAN OF MEDICAL INSPECTION

**Physicians Employed by Detroit Department of Health Now Work as Specialists—Racial Groups Show Marked Differences—Italians Have Best Teeth.**

To study the prevalence of physical defects among school children, the Detroit department of health has reorganized the plan of school medical inspection. Formerly each physician assigned to the schools by the department of health took charge of a group of three or four schools and did all types of health work, including diagnosis of contagion, immunization, and examinations for physical defects. With 40 or more individuals reporting a single kind of work it was impossible to compare one school or district with another.

Under the new plan the work is specialized, one group of physicians doing diagnostic work, another all immunization work, and a third group all physical examination.

The examinations have been made by four teams of three men each, each team doing all examinations within its section of the city. The examination itself was specialized so that one man on a team examined heart and lungs, another vision and hearing, and the third nose, throat, etc. The result of this change has been more uniform reporting, so that results in one school or district are comparable with another.

During the school year 1921-22, these physicians examined 22,000 children of the first grade, 14,000 of the fifth grade, 10,000 from various grades who were recommended for examination because of being 15 per cent or more underweight, and 12,000 children from various grades who were recommended to the examiners by the nurse, the principal, or the teacher on account of some specific defect.

Of the 8,887 underweight children nearly three-fourths had one or more physical defects. The most common defect was enlarged or infected tonsils, more than half of the children having this trouble. Nearly one-fourth had defective teeth. Other defects found in less than one-tenth of the children in this group included faulty vision, mouth breathing, anemia, abnormal heart, abnormal lungs, enlarged thyroid, and defective hearing. Russian children had more eye defects than those of any other national group.



## STOCKHOLM TRAINING COLLEGE FOR VOCATIONAL TEACHERS

**Law Requiring Attendance in Continuation Schools Develops Need of New Type of Teachers—French View Favoring Artisans Not Prevalent in Sweden—New School Established—Aims and Courses.**

By P. H. PEARSON.

The Swedish education act of 1918 created a system of practical schools for adolescents in the age range 14-18. Like the British education act of the same year, it provides for part-time attendance by young wage earners. The Swedish boy or girl who has left school before reaching the age of 18 will, after 1924, be required to attend a continuation school for a minimum of 360 hours above and beyond the obligatory elementary period. After having completed the 360 hours, he may, according to the arrangements of the community in which he lives, be compelled to attend a local apprentice school for training in some craft of special importance in the local area.

Under this law a complex system of crafts schools is growing up in Sweden, notwithstanding the financial difficulties with which school authorities have to contend. As in England, protests against the expense involved have reached the central Government, but, unlike England, no reduction in local or State budgets that would retard the operation of the law has thus far been made.

### Instruction Based on Regional Industries.

But in building up this system of schools the authorities are meeting obstacles of other kinds also. Fundamentally, each apprentice and crafts school must make the regional industry of its area the core and center of its instruction. About this nucleus related and general subjects are to be grouped. Hence study programs and organization as varied as Sweden's varied areas require. To meet these requirements the education authorities have prepared a dozen or more type programs, which, with only slight alterations, are expected to be adapted to local needs. These type programs center on such industries as agriculture, shipbuilding, the carpenter's trade, the fishing industry, metal working, engineering, home economics, and courses where older artisans may receive instruction in the latest developments in their respective trades. In the household course for girls a single-type pro-

gram is expected to be suitable to different regional needs without much change.

But another problem which can not be solved in an educational office confronts the organizers. The crafts schools require a new class of teachers with skill of hand and an outlook and bent of mind that they do not acquire in any existing teacher-training institution. An official committee reporting on these matters showed that such teachers could not be recruited from any present class. About 40 per cent of those teaching in the present technical school were folk-school teachers, with little or no experience in the practice of an artisan's calling. Graduates from the higher technical institutions had studied the industrial lines from the side of theory and art, especially in manual work and sloyd, and were inclined to thrust irrelevant and impractical matters into the instruction. Again, persons engaged in industrial occupations and trades constituted 25 per cent of the teachers in the lower technical and trade schools. The experience with this class is that, while they have the necessary technical skill, they usually lack the educational insight necessary to judge the personal needs of a pupil.

### Swedish View Opposes Workmen as Teachers.

Right here Sweden's experience differs from that of France. In the latter country a carpenter or a blacksmith has charge of the elementary instruction during the hours scheduled for his trade. If the school is to be sufficient in itself, the authorities hold, and its instruction separate and detached from the environs, workmen are out of place in the school workshop. But if the school is to prepare pupils for life's practical duties and foster respect for and interest in physical labor, no better can be done than to have the pupils instructed by real workmen in the use of actual and ordinary tools. A manual-training teacher steeped in the school courses does not handle the tools in the convincing way that the workman does. All the normal colleges of France give courses in work instruc-

tion, and the class teacher is therefore fairly capable in the management of school assignments of this kind. But the workman is preferred, not only on account of a different knack with the tools, but chiefly to help the pupils in the transition from school to life. By studying with him in the schoolroom, the pupils receive a foretaste of the apprentice arrangement, so that he may better find his bearings later. This is the French view.

Though realizing the importance of the actual "touch with things" embodied in the workman teacher, the Swedish committee held that the larger outlook was also necessary. They felt, moreover, that the comprehensive system of practical schools now being established should have a center and rallying point in a central institution from which details of the new organization could be surveyed and where teachers could live themselves into the spirit of the new departure unhampered by either local pressure or by traditions. In view of these considerations, the Riksdag in 1920 made a preliminary appropriation of 45,000 crowns, which was shortly afterwards augmented by 80,000 crowns.

### Necessary First to Prepare Text-Books.

In this way Sweden came to have a teachers' training college of a new type, which in its courses and other activities embodies the tested points of advancement now reached in Europe. This Central Institution for Vocational Teachers is located in Stockholm. Its chief aim is set up as a center for the work of training teachers of the crafts. To that end its first duty was to institute courses in teacher training to meet the needs of the new practical schools. Further duties came in sight immediately, namely, drafting outlines for textbooks as well as handbooks for teachers, conducting experiments with the view of finding and fashioning suitable instruction material and equipment, preparing models and drawings adapted to schools of different regional industries.

Aside from its function of guiding the instruction of teachers it was foreseen that guidance would have to be extended also to specific localities to help these in the work of constructing and organizing their respective schools. To that end a special bureau in connection with the institution answers questions that come in, submits plans and programs, directs organizers who seek the advice of architects or other experts, advises in regard to material, costs, plans, and literature.

The difficulty in assembling in one institution the equipment and material for

the work of training came in sight early. At first it appeared that teachers in agriculture, shipbuilding, etc., would of necessity have to receive their practical training at places where these industries were carried on. A tentative arrangement was made fully open to such alterations as later should seem wise, namely, to affiliate with the Central Institution at Stockholm, apprentice schools and crafts schools in Stockholm and elsewhere, which would furnish material for the practical work of the courses. The teaching staff and facilities of those institutions, as well as industrial plants, are to be utilized when expedient.

A report at hand covers the work of the institution during the year of its organization, 1921. Four groups of teacher-training courses of a continuation character were given. Group I, for teachers of apprentice and crafts schools, comprised subjects such as labor legislation, vocational hygiene and sanitation, patent regulations, and some 15 other topics. Group II, training of teachers of furniture making—machines, tools, material. Group III, for teachers of commerce—bookkeeping, national economy, and commercial law. Group IV instructed teachers of home economics—sewing, the use of tools, drawing of patterns, material, vocational hygiene, and vocational economics. Two groups of courses in educational science were given. The lecture series dealt with educational psychology, history of education, survey of teaching practice, lessons and exercises, illustrative lessons, methods and practices of certain schools.

The present organization of the institution is particularly adapted to a period of growth where all forms are open for the embodiment of features that experience and experiment shall judge desirable.

### GIVES BROAD TRAINING IN TEXTILE INDUSTRY.

To give broad and comprehensive training for the textile industry is the aim of the Lowell (Mass.) Textile School. Courses covering one, two, and three years are offered in various branches pertaining to the textile industry, such as cotton yarns, designing, worsted yarns, weaving, finishing, dyeing, steam, electricity, etc. Individual courses may be taken, but more and more students now desire to combine several related courses to broaden the scope of their training.

Firms asking for graduates from this school generally require men who are broadly and thoroughly trained, and very few requests can be met by young men who have not completed a full course.

## CONDUCTING A ONE-TEACHER SCHOOL

### State Superintendent of Illinois Presents Plan for Reducing Number of Recitations—Individual Instruction for Older Pupils.

To allow opportunity for instruction and drill, one-teacher schools should abolish the practice of having every class recite daily in every subject, and instruction should be substituted for the mere testing of the pupil's knowledge, according to a bulletin entitled "Organizing and Teaching a One-Teacher School in Illinois," issued by F. G. Blair, superintendent of public instruction. When all the grades are present the classes are too numerous to give adequate time to any of them. This number has been reduced by alternating the studies of one year with those of the next, but even under this plan there are 27 to 38 classes to be taught. To give each of these classes a daily recitation period allows only 10 minutes for each one, and the shortness of this period allows the teacher time to do little else than test the pupils.

#### Beginners Require Daily Class Instruction.

To avoid the handicap of too many recitations, which is the great error of many one-teacher schools, the bulletin recommends that better use be made of textbooks from the third grade up. Pupils in the first and second grade require class instruction every day in every subject, but older pupils can work on an assigned lesson, solving problems with a certain amount of instruction at the beginning of a piece of work and with some discussion at the end of it.

By the use of directed study periods and individual instructions to help pupils in working out problems the number of class recitations may be reduced from 30 recitations a day to 16, giving longer class periods and allowing the teacher plenty of time to do real teaching in both recitation and study periods. On account of the wide difference in the ability of pupils, individual instruction gives the rapid workers the opportunity to do as much as they are able, while the slower ones can go more slowly without holding the others back. Two pupils in the same class may be far apart in the subject.

#### No Need for Changing Organization.

To use this plan in a one-teacher school, the organization need not be different from what has been adopted gen-

erally. The eight grades of pupils are grouped into four divisions. The school day is divided into four work periods, with three intermissions or recreation periods between. The whole school works on the same subject at the same time, spending the first period on reading, the second on arithmetic, the third on language, and the fourth on geography and history. The minor subjects, spelling, writing, physiology, civics, and nature study are placed at the end of periods assigned to major subjects.

Two suggested daily programs for individual instruction and directed study are presented in the bulletin, with suggestions for the division of time between directed study and recitations. Usually not more than four classes in a period need to recite, using 12 minutes to a class and allowing 20 or 25 minutes of each period for individual instruction and direction to the classes which do not recite.

#### Reports Show Progress in Each Subject.

To determine the standing of the different pupils it is suggested that a record be kept on which the amount of work completed in the various subjects is checked off. A certain pupil who has completed the whole amount of work in arithmetic planned for the present month may be a week behind in spelling. His progress in every subject is indicated on the card and he may be advised by the teacher to use some of his arithmetic time for spelling. This record should be posted on the walls of the class, says the bulletin, so that each pupil can see how he stands compared with the rest of the class as well as how far he has progressed in the work required for the grade. Suggestions are given for instruction in several subjects by the problem plan.

### EUROPEAN CUSTOM OF SALUTING THE DEAD.

A custom is prevalent in Europe, which might well be recommended and encouraged for introduction among the school boys of the United States through the medium of the United States Bureau of Education. I refer to the custom of saluting the dead by raising the hat or cap when passing a funeral cortege in a public thoroughfare. This mark of respect and reverence is invariably noticed and always favorably commented upon by Americans in Europe. While this report may not be within the purview of the duties of a consul, I feel that the matter is worthy of attention.—*Leroy Webber, American Vice Consul in Charge, Palermo, Italy.*



## HURRAH, IT IS NOT A LEDGE!

**The Obstructions in the Road of Educational Progress Are Merely Boulders Which Will Be Easily Pried Out When Everybody Bears on the Crowbar.**

By DOROTHY CANFIELD FISHER,  
Member Vermont State Board of Education.

If there is any one process familiar to all Vermonters, it is tackling a rock which has long lain in a highroad, and been a bother and hindrance to all who passed. We have an intimate acquaintance with that process; first the rising heat of impatience at seeing it there, day after day, a stumbling block and a danger; then the resolution finally taken that something must be done about it; then the going out with pickax, shovel, and crowbar to attack it, everybody hoping it may only be a loose, big boulder that can be rolled away, everybody fearing that it may be a ledge that is part of the solid rock.

### First Efforts Accomplish Little.

There follows a time of work that doesn't seem to get you anywhere, as you pick and shovel the earth away from the sides of the rock. The more you dig the bigger it looks. The part that has been visible so long is only one corner. Perhaps it is a ledge that runs right down to China. You put the crowbar under one corner and heave with all your might. Nothing doing. You change tactics and try to reduce it by using the pick, and, although you sweat like a horse, you only succeed in chipping off a flake or two here and there. No; you'll never get anywhere that way.

You draw a long breath, and go back to digging and prying with the bar. You get a new place to slip the crowbar under, and pry with all your might. It seems as though it had stirred a little!

You fling off your hat and coat and go to it, every muscle cracking, and all of a sudden—hurrah!—it gives way. One end has distinctly moved, lifted. The whole obstruction is several inches further out of its hole. It's not a ledge! It can be moved! Now you know you can handle it.

Is there any more cheering moment than that!

Just such a cheering moment has come in the struggle to improve Vermont rural schools, and all Vermonters ought to know about it, so that they can give a hurrah, along with the workers in the

field, over the first big result of the push for better schools.

At first, the more the question was investigated, the more discouraging things looked. Nobody had any idea that so many rural schools in Vermont were in such bad shape. The job was bigger and harder than had been thought. Last June, six months after the survey of rural schools began, we of the State department of education were frankly startled at the size of the obstacle over which Vermont teachers and children were forced painfully to clamber as they tried to climb up to an education. It was a big job. Would Vermonters put their backs into clearing out the road? Individual action here and there would not make much impression. It would take all the individual action possible, and concerted town action, too.

Well, after various small encouragements here and there, individual schools brought up to standard, private organizations taking an interest, the first big push has been made. One whole corner of the rock has come up with a jerk, furnishing the proof that Vermont energy and public spirit are keen enough and strong enough to roll away out of the road of progress the hateful old conditions which have so long been a stumbling block to our children's feet.

### Every School Up to Standard.

The town of Hartford has gone over the top with a shout, all flags flying. There are seven rural schools in Hartford, and in the course of the last year every one has been brought up to standard; indeed, six out of the seven are not only standard but superior.

What does this mean? It means, first, the most important of all, that every one of the eight teachers is thoroughly well trained, competent, and decently paid. No pinch-penny, cheap economy there at the expense of children who can't help themselves. Next, it means that every building has been put in good shape, with adequate toilet facilities, with comfortable heating arrangements, with desks and seats to fit the children,

with enough textbooks to go around (you will be shocked to know how seldom there are enough schoolbooks in Vermont rural schools), with sufficient blackboards, with smooth floors and tight windows, with some good reading matter, and good ordinary facilities for recess-time playground outdoor fun.

Thus every child in Hartford has a fair chance to get the education which every American child ought to have, and which so many Vermont country children do not have. After polishing off a splendid job of that sort Hartford people must be sleeping better nights, and looking at their children with pride and not with apologies.

If I were a Hartford woman, I would feel an inch taller. They have set a shining example for other towns of the State to follow. Will they do it? All over Vermont interest is rising in this great and vital question. In women's clubs, in parent-teacher associations, in organizations like the D. A. R., in country homes, in meetings of school directors, plans are being discussed to help rural schools. The town of Hartford has led the way and the rest of us will not be slow to follow.

Every local school board in Vermont ought to send one of its members to Hartford to look at those schools. Every woman's club ought to see them; every Vermont teacher ought to know about them. There ought to be a procession of Vermonters driving into Hartford to inspect their schools and to find out what a really good rural school can be when a really good Vermont community sets out to make school conditions right.—*Vermont Standard*.

NOTE.—Before the State school survey of Vermont was completed the State board of education was aware that the rural schools of the State were in a deplorable condition. They realized that something must be done and done quickly. So in June of 1921 (six months after the survey began), they devised a plan of standardization as a means of improving the 1,160 rural schools in the State. A rating card was issued. This card scores the schools under five main headings: (1) Buildings and grounds, 26 points; (2) equipment, 27 points; (3) teacher, 18 points; (4) pupils, 12 points; and (5) community, 17 points.

The commissioner of education is authorized to award a name plate bearing the words, "standard school" or "superior school" to schools that meet requirements. A standard school must score between 75 and 89 points, inclusive, and a superior school, 90 points or more.—*Edith A. Lathrop*.

## SCHOOL LIFE

Issued monthly, except July and August, by the Department of the Interior, Bureau of Education.

Editor, JAMES C. BOYKIN.  
Assistant, SARA L. DORAN.

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JANUARY, 1923.

### AN ACCIDENTAL OMISSION.

The excellent paper presented in the December number of *SCHOOL LIFE* on the "Junior college movement in Missouri" was previously read by the author, Dr. John Carleton Jones, before the National Association of State Universities. The line stating that fact, which should have been at the head of the article, was accidentally omitted.

### FOR THE CAUSE OF RURAL EDUCATION.

This number of *SCHOOL LIFE* is devoted in large part to the interests of the children in the rural schools of the United States. Their welfare is the sole concern of one division of the Bureau of Education and should be, in my opinion, a consideration of primary importance in the administrative system of every State in the Union. The school term is shorter; the teachers receive a lower salary and are of lower standard, judged by academic and professional qualifications; buildings are less comfortable, convenient, and sanitary; tools to work with in the way of teaching materials more meager; instruction is less effective and general educational opportunities harder to get in rural than in city communities and schools. Yet the rural child is the ward of the State and must recruit its future citizenry as much as the city child. It is because of these conditions that we would devote ourselves anew during the coming year to an effort to secure for rural children educational facilities more nearly adequate and more favorably comparable to those now offered in cities. We would not detract in the smallest degree from what city children now have—we would add in every respect to their advantages in as large a measure as we can. But while doing this we would also, and simultaneously, devote ourselves with equal zeal to raising the measure of opportunity for rural children so that all may be on the same, or a more nearly

equal plane educationally. It is not essential to serve city children less because we serve rural children more and better.

The Bureau of Education in this number of *SCHOOL LIFE* renews its devotion to the cause of rural education and again pledges itself in the future as in the past to do all in its power to the end that all American boys and girls have adequate educational opportunities regardless of whether they happen by chance to live on a thriving city street or in a remote, isolated rural community. The public school system is equally for all—never for the few—of America's children.

JNO. J. TIGERT.

### AMERICAN EDUCATION WEEK HIGHLY SUCCESSFUL.

We are publishing in another column a letter from Capt. Garland W. Powell, director of Americanism for the American Legion. This letter speaks most enthusiastically about the accomplishments of American Education Week. We have also received letters from every section of the country telling of the many ways in which the program for American Education Week was observed. We wish that we had space here to detail more of the outstanding accomplishments of the week. We have neither time nor space to do this.

We want to take this opportunity to congratulate the many loyal workers and supporters of education, particularly our great throng of untiring teachers, who have united to make this week so highly successful. Likewise we wish to summarize as far as we are able to do so at this time the outstanding features of the week's campaign.

In addition to President Harding's proclamation, the governors of 42 States issued proclamations or statements. We did not attempt particularly to carry the campaign into the Territories, but Governor Bone, of Alaska, issued a proclamation and the week was satisfactorily observed there. Literally, hundreds of thousands of sermons, addresses, and speeches were made upon educational subjects during the week. The Bureau of Education made use of the Government broadcasting station at Anacostia, and in many States addresses were broadcast daily from the newspaper offices and commercial stations on the special topics assigned for the various days of the week. If there was a newspaper in the United States which did not take part in the campaign either by issuing a special educational edition, by editorial support, or by the publication of stories and articles, we have not heard of it.

It is a conservative estimate that fully one-half of our newspapers supported the campaign editorially.

We were very fortunate in securing the cooperation of the motion-picture producers, distributors, and exhibitors. The United States Bureau of Education began early to negotiate with the motion-picture industry to have educational material carried in the motion-picture houses throughout the United States during American Education Week. We were successful in our efforts and, so far as we know, this material was exhibited in every motion-picture theater in the country.

Last year it was estimated that the campaign reached 30,000,000 people. It is conservative to suppose that we reached more than 50,000,000 people in this campaign. Nearly 20,000,000 were reached in the motion-picture houses alone. How many were reached through the radio, the newspapers, and other agencies, it is difficult to ascertain.

Already we have learned of a number of instances where bond issues were put over and actual constructive results have come about as a culmination to the campaign.

Some may wonder why we had such a campaign. When we recall that education in the United States emanates from the people and is controlled by the people, and therefore no step forward can be made except as the result and with the approval of public sentiment, it is obviously of fundamental importance to familiarize the public generally—the ignorant man, the plain man on the street, as well as the educator and the educated man—with the needs of education. Steps forward, which are understood by educators but misunderstood by the public, precipitates reactions which are more detrimental than a lack of progress. We believe that the only progress in education which is worth while is a progress which keeps pace with public intelligence and public enlightenment.

JNO. J. TIGERT.

### SALARIES OF RURAL SCHOOL TEACHERS.

An investigation recently made in the Bureau of Education showed that the children in the city schools are offered an average school term of 182 days, while the average term in rural schools is less than 137 days; that the average number of days attended by each pupil enrolled in the city schools is 143, while the average pupil enrolled in the rural school attends only 96 days.

Why does the city school hold nearly 79 per cent of its enrollment in average



daily attendance while the rural school, with a term more than two months shorter, has an average attendance of less than 71 per cent?

Bad weather, bad roads, and other physical conditions in the country may reduce the average daily attendance somewhat, but the chief reasons center in the school itself. Poor schoolhouses, badly lighted and poorly heated, inadequate classroom equipment and poorly paid teachers account for an average attendance of less than 50 per cent of enrollment in some parts of the country.

How often have we heard some country matron thus express herself: "I certainly shall not force my children to tramp through mud and slush to half freeze in that old schoolhouse and say their lessons to that teacher who doesn't know anything."

Why is it that the teacher "doesn't know anything?"

She is not paid to know very much. For four or five months she will receive the poor salary the district is able to pay. There is no prospect of an increase the next year—possibly a reduction. The other districts she knows about offer no better inducements. She has no incentive to make of herself a better teacher in that community. If, happily, she has ambition and energy, she may prepare herself for a better position with better pay in a village school or in the schools of a small city. In either event she would abandon her present charge to a less competent teacher.

A short time ago the rural-schools division of the Bureau of Education issued a circular on "Salaries of Teachers in Rural Schools in 1922." It was compiled from special reports made by about 43 per cent of the county superintendents of the United States, apportioning 126,633 teachers to designated salary groups. More than 55 per cent of these teachers, or 70,124, were in charge of one-teacher schools. In 6 States these teachers received a median salary between \$300 and \$400 a year; in 5 States the median salary was between \$400 and \$500; in 3 States between \$500 and \$600; in 5 States between \$600 and \$700; in 6 States between \$700 and \$800; in 11 States between \$800 and \$900; and in 6 States between \$900 and \$1,000. In 5 States only did the median salary of the teachers of one-room schools exceed \$1,000.

The salaries enumerated are near the average salaries in the groups. Of course, there were salaries very much lower in all the States. Nineteen States had lowest salary groups of less than \$300 a year in the one and two teacher schools.

That rural school circular contained a table showing the median salaries of

127,260 elementary teachers in city-school systems. It was shown that in 968 cities of 2,500 to 10,000 population the median salary was between \$1,000 and \$1,100; in 286 cities of 10,000 to 25,000, the median salary was between \$1,200 and \$1,300; in 141 cities of 25,000 to 100,000, the median salary was between \$1,300 and \$1,400; and in the 49 cities of over 100,000, the median salary was between \$1,800 and \$1,900.

No one will contend that the salaries paid city teachers are too high. The services of these teachers make the schools what they are. If our country schools are to be made comparable with the average urban schools then we must find money enough to pay living salaries to teachers, provide better schoolhouses and equipment, and lengthen the school term to nine months.

ALEXANDER SUMMERS.

Who's who in educational administration will appear in the first published list of members of the department of superintendence of the National Education Association, the first annual publication of that department. This will be distributed to members at the meeting at Cleveland in February. A feature of this publication will be an article on the status of the superintendent based on the data collected by a committee appointed at the Cleveland meeting in 1920.

**O**UR PROGRAM of admission and treatment of immigrants is very intimately related to the educational policy of the Republic. With illiteracy estimated at from two-tenths of 1 per cent to less than 2 per cent in 10 of the foremost nations of Europe, it rivets our attention to a serious problem when we are reminded of a 6 per cent illiteracy in the United States. The figures are based on the test which defines an illiterate as one having no schooling whatever. Remembering the wide freedom of our public schools, with compulsory attendance in many States in the Union, one is convinced that much of our excessive illiteracy comes to us from abroad, and the education of the immigrant becomes a requisite to his Americanization. It must be done if he is fittingly to exercise the duties as well as enjoy the privileges of American citizenship. Here is revealed the special field for Federal cooperation in furthering education.—President Harding.

## A WEEK OF GREAT ACHIEVEMENT

### Letter From Official of American Legion Expresses Gratification at Success of American Education Week—Interest in Education Stimulated Everywhere.

THE AMERICAN LEGION,  
NATIONAL AMERICANISM COMMISSION,  
Indianapolis, Ind., December 18, 1922.  
HON. JOHN J. TIGERT,  
United States Commissioner of  
Education, Washington, D. C.

MY DEAR DR. TIGERT: I am advised by the American Legion Weekly that in their estimation American Education Week was one of the biggest things ever accomplished in this country.

The reports show that activities carried on during the week of December 3 to 9 stimulated interest in educational matters all over the country. Never before in the history of the United States has such a concentrated effort been made by all Americans to bring America where it rightfully belongs, namely, first in matters of education, as well as in other things.

Unfavorable local conditions were corrected in many communities, and where they could not be corrected immediately the people have started to work in order that those conditions can be corrected as soon as possible.

Patriotic, civic, religious, commercial, and other organizations have never before taken such an interest in educational matters. They have aroused their members to take a part and an interest in the great need and necessity for better education and educational facilities. These organizations in many instances have assured us of their continual cooperation at all times in our efforts for a bigger, greater, and better educated America.

American Education Week this year marked the beginning of a new era in matters of education.

I wish to thank the United States Bureau of Education and the National Education Association for their wonderful cooperation. The coordination of our efforts made possible the greatest educational campaign ever conducted in America. Your cooperation made possible the many accomplishments and the great success of this week. Please extend to all the deep appreciation of the legionnaires.

Faithfully yours,  
GARLAND W. POWELL,  
National Director,  
Americanism Commission.

## OBJECTIVES IN RURAL- SCHOOL AGRICULTURE.

(Continued from page 97.)

Thomas Jefferson voiced the fear of decay through urbanization of the Nation in these words: "Generally speaking, the proportion which the aggregate of other classes of citizens bears in any state to that of its husbandmen is in the proportion of its unsound to its healthy parts and is a good enough barometer whereby to measure its degree of corruption." Again, he said, "Let our workshop remain in Europe \* \* \* the mobs of the great cities add just so much to the support of pure government as sores do to the human body. \* \* \* I consider the class of artificers as panderers of vice and the instruments by which the liberties of a country are generally overturned."

### World Power Related to City Growth.

Jefferson has not been lacking for disciples to keep alive the fear of national decay through industrialization and urbanization. The fact is, however, that those who fear the growth of cities fear civilization. The natural evolution of all great world powers of to-day has been through a predominantly agricultural life to a predominantly industrial and commercial life, with a gradual increase in the ratio of city dwellers to country dwellers. There is, in fact, almost a perfect positive correlation between world power and the percentage of nonagricultural workers in the nations of to-day. In the United Kingdom the percentage of nonagricultural workers in the total of occupational workers is 87.6; in the United States it is 67.5; in Germany, 65.7; in France, 57.6; in Italy, 41.2.

It is problematical under the conditions to-day as regards world commerce how far a nation can go in the process of being urbanized without being endangered.

### Production Increases More Rapidly Than Population.

In the United States, however, though our cities are growing by leaps and bounds and our population rapidly increasing, agricultural production is more than keeping pace with increase in population.

The total population as determined by the 1920 census is 2.7 times the population of 1870, while agricultural production in 1920 was more than three times the production in 1870. The following ratios are typical:

Quantity.	1870	1920
Sheep.....	1	1.2
Swine.....	1	2.1
Horses.....	1	2.7
Dairy cattle.....	1	2.8
All cattle.....	1	3
Mules.....	1	4.8
Tobacco.....	1	5+
Cotton.....	1	3.7+
Hay.....	1	3.3+
Corn.....	1	3+
Oats.....	1	3+
Wheat.....	1	3+

### Marked Improvement in Quality.

In the case of live stock the increase in the number of live stock is no index of the increase of live-stock products. Dairy cattle are being rapidly improved and better fed so that multiplying numbers by 2.8 means multiplying production enormously. The same is true for poultry, swine, and beef cattle.

When we consider also that through cold storage and manufacturing processes much more complete utilization of agricultural raw materials is possible it must be evident from the standpoint of production, that agriculture is expanding faster than population. It is difficult to see any failure of rural life on this score.

There certainly is no immediate probability of under production. In 1921 campaigns were conducted in an attempt to limit production arbitrarily. Cotton farmers were agreeing to limit acreage as much as 33½ per cent. Corn growers were burning corn for fuel. Sheep growers found their products so nearly worthless that shipments would not pay freight charges. Fruit and vegetable growers were forced to leave their products to rot in the fields because of no market. Farmers were deliberately using no fertilizers and adopting less intensive methods. In some sections farmers returned to a part-time basis because markets were not available for their products that would pay the cost of production. Undoubtedly we have just experienced one of those cycles of overdevelopment of agriculture which have come periodically in our history.

### One-Fourth of Land Area Cultivated.

We are far from that condition wherein we must seek high production per unit of area. Approximately 25 per cent only of the land area of the country is under cultivation. No one knows the limits of increased acre production. In the past 10 years acreage increased only 10 per cent in the Pacific Coast States while production increased approximately 100 per cent. So long as our problem is a problem of high production per man and not high production per unit of area; so long as farm machinery

continues to be improved and our farmers continue its increased use; so long as agricultural science continues to function in increased acre returns; so long as the improvements of plants and animals continue, the ratio between agricultural workers and total population will probably be a continually widening ratio. So long as production keeps pace with total population increase and we are exporting surplus stocks of all the principal agricultural products as at present, we need not be concerned about keeping more people on the farm.

### Agriculture No Longer Dominant Industry.

There was a time in our history when agriculture was our dominant basic occupation. All other enterprises developed as a fringe about agriculture. Then our national progress did depend upon agriculture and world markets in agricultural products.

That condition, however, is past. Our manufacturing and industrial interests have become dominant. Machines and processes applied in other extractive industries, utilizing our varied natural resources have changed our principal form of dependence. To-day agriculture contributes to and waits upon commerce and manufacturing rather than limiting commerce and manufacturing. Any future development of agriculture will grow out of a developing nation and be conditioned by national progress. The Nation is no longer dependent upon agriculture but master over it.

### Agricultural Labor Increases in Effectiveness.

Because of increased effectiveness of agricultural labor, although the percentage of agricultural workers to total population is decreasing, production is more than keeping pace with domestic markets. The probability is that our rural problems grow out of overproduction and congestion in the agricultural occupations, rather than out of migration from country to city. Any effort, therefore, to keep a higher percentage of farm boys on the farm can not be justified.

Aside from the fact that there is no national need, it is not justifiable to seek consciously to give any boy or girl a bias toward any vocation because of any need, fancied or real, of developing that vocation. The nature of the boy or girl alone should determine his work in life. Our duty in education is to find out the aptitudes and limitations of boys and girls; to know the requirements, possibilities, and difficulties in specific vocations and advise only in the light of fitness of the boy or girl for the vocation



undertaken. We have a duty of presenting the panorama of life; making the child widely adaptable; helping him to free and intelligent choice of vocation; and, finally, specific training designed to fit him for effectiveness for the chosen vocation.

#### Country Boy Entitled to Free Choice.

It is hardly possible in the elementary school that the possibilities in life can be presented to children so that they can make an intelligent choice of a vocation. It is hardly possible for the teacher to have had the child sufficiently under observation that his aptitudes and limitations in specific directions may have been catalogued, so that he can be intelligently advised by the teacher. Consequently, a restricted program designed to prepare for a particular field is vicious. Conscious vocational education in the elementary school has small place. Hardly more than half of rural boys and girls will be farmers. Every rural boy and girl has the right to as free choice of life's work as has the city boy or girl. No American community will tolerate a conscious, class-restricted education when it knows what is being done.

#### Must Not Form Peasant Farming Class.

Free migration in response to individual opportunity has always been the outstanding characteristic of the American citizen. We would not have it different. Only through maintaining this open road may we avoid what is an apparent historical tendency in civilized States toward stratification of society into castes. Every old civilized State of Europe has its peasant farming class. Our escape, if we are to escape, must be through a program of education that will facilitate, not retard, free migration and easy adaptation to widely varying environmental conditions. So long as the road is open we may trust economic forces to balance vocational groups, avoid either congestion or depletion, and so long as there is a continual streaming of human materials from section to section in the great migration, complex sectionalism, provincialism, and castism will be reduced to a minimum and the melting pot kept boiling.

So it is that vocational guidance, rather than specific training, in the skills of the practice of agriculture should characterize instruction in elementary agriculture. Using the agricultural approach, we must lead the child to appreciate the possibilities in specific agricultural vocations and to understand the characteristic features of the dominant vocations of the world.

#### Appreciation of Nature.

To the average farm boy plants are either crops or weeds; animals are beasts of burden, game to be hunted or a nuisance; weather is good or bad for crops; skies indicate good or bad weather; topography reveals good farm land or worthless; and soil is dirt. Little enjoyment of nature is possible, because he knows little of the interrelations of life forms and sees physical nature only as related in a general way to crops. We should seek consciously to give an intimate understanding of the vital interrelationships of life forms, to the end that—

"finding that of fifty seed,  
She [nature] often brings but  
one to bear"—

may not be cause for doubt; and though he sees "nature red in tooth and claw," he may understand that the result is the continual selection and perfecting of life forms, so that good is indeed the final goal of seeming ill.

The ability to see beauty and harmony in nature comes out of intimate knowledge. It is one of the chief sources of contentment and high manhood in rural life. Appreciation should be consciously sought through direct observation and guided interpretation and through an introduction to that which is good in nature literature.

#### Adaptation to a Rural Environment.

While our chief concern is laying such a foundation as will make rural children easily adaptable to a wide range of environmental conditions we must not overlook the fact that approximately one-half of all the children in rural elementary schools will live their lives in typical rural environments. It is also true that whatever the environment of the child may become in adult life he will be affected directly or indirectly by rural life problems. The factory worker, the business man, the professional man, the politician and statesman needs to have a very clear understanding and appreciation of rural life in order that he may react intelligently to proposed solutions of problems on a national scale. A better understanding of the conditions of living and needs of country life to-day on the part of urban dwellers is highly desirable. This is true not only that the former may get just treatment but that a sane national program may be planned and carried out which will react in the well-being of the whole national group.

The first consideration should be to lead rural children to understand their immediate environment and to lead from this to those more complex, artificial,

and remote environments afforded by urban communities.

#### Introduction to Technical Agriculture Proper.

In teaching the subject matter proper of agriculture we are concerned more with unfolding the possibilities of agriculture as a vocation than with turning out a product skilled in the manipulative activities and master of the technical knowledge necessary to insure effective practice of agriculture. This demands that we present an adequate picture of what agriculture is at its worst and at its best. It demands a survey in the elementary school of national agriculture rather than extended training in the processes involved in farm enterprises of local importance. We are more concerned with using agricultural subject matter in such a way as to acquaint the child with present sources of information and safe procedure in solving actual problems than with complete or detailed mastery of the subject matter itself in its technical aspects. We are more concerned with teaching the means of securing the just rewards due because of production than we are the technique of production.

#### Group Action Supplements Individual Action.

Whether we like it or not in all respects the trend of our national life is toward supplementing individual action by group action. Individual competition no longer will suffice. Men contend in groups and not merely as individuals, and group action frequently permits economies impossible under individual action. Certain groups have related interests easily seen and these tend to become amalgamated so that organization of the Nation into enormously powerful combinations of vocational groups is proceeding. There is no alternative left other vocational groups whose interests are opposed to the interests of organized groups. They, too, must organize or be exploited. The most serious problems confronting the Nation to-day are problems growing out of this fact of vocational group organization. Unless the young are taught the proper relationship of group to group in our national life, we are surely riding to a fall. Unless those who are to become farmers are taught specifically the advantages of co-operation and organization; unless they are taught the means of securing legislation; unless they are trained to watch the legislative program of other groups and read aright the effect of that program upon their own group; unless they are taught the distributive machinery of the Nation and specialized service required in the distributive process they must continue to be exploited.

Herein lies the secret of the failure of our educational program to solve the rural-life problems. We have placed an undue emphasis upon production leaving the exceedingly complex and artificial distributive machinery practically to take care of itself. We have failed to teach the essential principles of cooperation and group action made necessary by our social organization. We have failed to teach group interrelationship, so that farmers have little ability to see the effect upon the farming group of other group programs. Those who have led in rural thought have failed to get across the necessity of farmers' organizations as a means of economy in distribution and self-preservation in the struggle for existence against other organized groups bent upon their exploitation. This explains why the farmer of the United States, although the most efficient agricultural worker of the world, has not bettered his lot even though he has bettered his practice. Uneconomic distribution and inability to compete against organizations have robbed him of a major portion of his profits. He has managed to live and to accumulate wealth. He has not been pauperized, but he has avoided it through drudgery and adopting a standard of living such as is unjust. His lot is little better than in pioneering days. He is entitled to more of the rewards of his toil than he has been able to get. Those who are responsible for his education should see to it that he be taught how to protect himself in the growing complexity of our social and economic organization and to make effective use of the economic machinery which the Nation affords.

#### Motivation of Other Subjects through Agriculture.

The language handicap is a very real handicap of rural children. In many cases, because rural education has never been very effective even in the form studies, they grow up under a bad language environment at home. They come to school with bad language habits fixed and they are taught more bad language habits in the schoolroom. They invariably have a narrow and limited vocabulary. They have spent more time in the elementary school learning to parse words and diagram sentences than in developing good language habits through practice of oral and written composition. In the rural high school, in many cases, no one except the English teacher assumes any responsibility for language. In the agricultural college the same undervaluation of language is apparent. Even a casual contact with the average graduate of our agricultural colleges furnishes evidence of the fact that in our

system of rural and agricultural education the language handicap is very real.

English is furthermore the bane of the rural boy. He shirks what chance he has for training in effective usage.

Because of these conditions we find rural children in high school failing in science, in mathematics, in agriculture, in every department because they read slowly, painfully, with little comprehension and under protest only. Agriculture can be used very effectively to motivate language and such usage in the elementary school is legitimate. Language objectives should be constantly sought in teaching agriculture.

#### Elementary Graduates Usually Slow in Arithmetic.

Arithmetic, like language, is a form study of the elementary school upon which much time is spent with a failing to get compensatory results. Number combinations are slowly and inaccurately made and the fundamental processes slowly and laboriously performed by the usual product of the elementary school. Numerous opportunities occur in teaching agriculture to offer additional practice and training in arithmetical processes. These opportunities should be sought. Much more value comes out of judiciously selected practical problems in agriculture involving mathematical processes than out of the solving of mathematical puzzles. Considerable working with numbers and measures is, moreover, unavoidable in agriculture. It is desirable that the teacher should frequently teach arithmetic in its natural rôle of a tool and not as an unrelated subject. Such teaching of arithmetic at the agricultural period when arithmetic is naturally involved will enable the teacher to leave off many arithmetic lessons. Any reduction of the number of daily recitations with a corresponding lengthening of the recitation period is highly desirable in the usual elementary rural school.

#### Geography and Agriculture Closely Related.

Geography is intimately related to agriculture. Much of agriculture is applied geography. It is much better to teach climate as related to the agriculture of a region than to teach the mere physical principles underlying climate. In tracing the distribution of agricultural commodities, place, geography, transportation routes and methods, and human interdependencies by nations are involved. Geography taught through agriculture presents geography in such a way that the significance of geography to the child's own life is seen. Geography is motivated and a means of reducing the number of daily recitations is again introduced.

History has just as intimate contacts with agriculture. The history of developing civilization is largely the history of man's increasing use and improvement of plants and animals and tools. It is a better history to teach than the history of wars.

In the elementary school it is legitimate to seek the motivation of these subjects which have been formalized by teaching their applications to actual present life problems. For rural children this means motivation through using the agricultural approach. Through teaching the subject matter of these distinct subjects through agriculture it is possible and desirable that frequently the period devoted to one of these subjects will be disregarded and the time given to the agricultural period, where the subject matter is taught in its application to a real, present, felt life problem.

Realization of the objectives here listed demands vocational guidance leading to free choice of a vocation, a survey of agriculture so that the child may judge intelligently whether he is fitted for the vocation and whether he wants to enter it for life. Some conscious effort to present those factors of a rural environment which demand adaptation to if one is to be effective in the environment or is to understand the problems of the environment, a conscious effort to remove language and number handicaps through attention to language and arithmetical process, as in the teaching of agriculture, and the motivation of other elementary school subjects, as geography and history, through using an agricultural approach. Agriculture is to be used to educate boys and girls, not to exploit them for the sake of presenting a startling achievement to their fathers; not to keep them on the farm in larger numbers so that theoretically the Nation may enjoy a cheap food supply—practically that there may be a larger spread between producer and consumer of agricultural products.

#### "A PLACE FOR THE ADVANCEMENT OF LEARNING."

What has the Nation a right to expect your college to be? The dean of a great university tells me, "A place for the advancement of learning." Another dean, "A place for the diffusion of learning." Still others, "A training school for the Nation's service." "A place of opportunity for rich, generous living." "A place where men and women may be developed who are intellectually curious; who are forming the habit of honestly seeking after truth; who view learning as an enterprise," to use Dean Woodbridge's term, "who delight in intellectual intercourse.—John Lee Tildsley in *Bulletin of High Points*.



## LAWS WHICH ENCOURAGE CONSOLIDATION BY STATE AID

By EDITH A. LATHROP.

Many of the States, in addition to the regular and more or less fixed State school apportionments, make special appropriations for the purpose of stimulating educational progress. Usually these appropriations are not apportioned as are the regular State funds, but are awarded school districts that meet certain conditions or conform to certain standards that are outlined in the law. Some examples of this are: Appropriations to match Federal grants for vocational education under the Smith-Hughes Act; allowances for salaries of county superintendents or other supervisory officers; aid for Americanization; and for teacher training in high schools.

The term "State aid" as used in this discussion means, for 14 States, money appropriated or apportioned from funds other than the ordinary State distributive fund and designed to promote consolidation; in 5 States (Delaware, Maine, Tennessee, Vermont, and West Virginia) it means that appropriations for the encouragement of consolidation are deducted from the State distributive fund before the apportionment is made.

### Nineteen States Aid Consolidation.

Nineteen States are encouraging consolidation by means of State aid as the term has just been defined. The conditions upon which this aid is granted, the maximum amount of money received by an individual school, how the money shall be expended by the school, and other details of the law are discussed in the following paragraphs for the 19 States:

**Delaware.**—The State board of education is required by law to transmit biennially to the governor and to the general assembly a State school budget. The law specifically states that this budget shall include an amount for the encouragement of consolidation of schools by State appropriations for new buildings and grounds.

The sources of income for this budget are a county property tax of 2½ mills which is paid into the State treasury, a personal graduated income tax, a tax of 2½ mills on corporate property, certain franchise taxes, and the income on the permanent school fund.

**Georgia.**—Beginning with the year 1920 special State aid, not to exceed \$100,000, is set aside annually to aid in the establishment and maintenance of consolidated

schools. When the county authorities combine smaller schools into a consolidated school with at least four teachers \$500 of this fund is paid annually to the consolidated school. If, in addition, the local authorities provide for a standard county consolidated four-year high school, \$1,000 more is appropriated. This latter amount is used to aid the local authorities in the payment of the salaries of the principal and at least one assistant high-school teacher.

### Number of Rooms Determines Amount.

**Iowa.**—Consolidated schools maintaining suitable grounds, buildings, and equipment for teaching vocational subjects and employing teachers qualified to teach these subjects are awarded special State aid. Two-room schools receive \$250 for equipment and the further sum of \$200 annually; three-room schools, \$350 for equipment and \$500 annually; and four or more room schools, \$500 for equipment and \$750 annually.

**Maine.**—One hundred thousand dollars (\$100,000) is reserved from the State school fund for equalization purposes. The law provides that a portion of this may be used for transportation. The State department of education is authority for the statement that a part of this \$100,000 is reserved as a mobile fund and placed in the hands of the State superintendent to be used for the encouragement of progressive movements. The State superintendent may then, if he wishes, use this to promote consolidation.

**Michigan.**—As State aid to assist in the maintenance of rural agricultural schools, which are one type of consolidated schools, each of such schools is entitled to receive \$400 a year for each vehicle used for the transportation of pupils. In addition each school is awarded \$1,000 a year. In order to participate in this aid districts must provide transportation for all pupils who live more than one mile from the school; and must comply with certain prescribed standards as to site, buildings, equipment, number of teachers, and course of study.

### For Transportation and Board, \$4,000.

**Minnesota.**—The law provides that the State shall reimburse consolidated school districts for the transportation of pupils at rates to be determined by the State board of education, provided that no consolidated school district shall receive an-

nually more than \$4,000 for the transportation and board of pupils for each consolidated school in such district. In order to receive this aid the term must be at least eight months, the school well organized, and the buildings and equipment suitable.

The law further provides that the State shall pay 40 per cent of the cost of construction for school buildings in consolidated districts, but not to exceed \$6,000 for each such school building constructed in a consolidated district.

### Aid for Building and for Salaries.

**Missouri.**—Special State aid is awarded consolidated districts for the construction of high-school buildings, for the maintenance of high schools, and for supplementing the salaries of elementary teachers. The details of the law for these items follow:

The State pays one-fourth of the cost of the construction and equipment of a central high school in a consolidated district provided the amount does not exceed \$2,000 for any one district. To be entitled to this building aid the site must contain at least 5 acres, and the building must contain a community assembly hall and be equipped with a modern heating and ventilating system.

When a consolidated district provides adequate buildings for school purposes, maintains an approved high school of at least the third class, and gives an approved course of at least one year in agriculture, the State grants special aid of \$25 per year for each square mile or fraction thereof in area of said district. But no district shall receive more than \$800 per year for the maintenance of such a high school.

### Maximum for Salaries, \$600.

When a consolidated school district has made the maximum levy provided by law and then finds that its funds are insufficient to maintain the elementary schools in the district for a period of eight months a year, paying the teachers a maximum salary of \$40 per month, the State allows such district a sufficient amount to make up the deficit. The law provides that a salary of \$45 per month may be paid by any such district to a teacher holding a second-grade certificate, and \$50 a month to a teacher holding a first-grade certificate. But no district shall receive over \$200 for any year for each elementary school, or over \$600 for any year for all its elementary schools unless the district contains an incorporated village, town, or city. Any district making application for this aid must show that it has made a levy of 65 cents on the one hundred dollars (\$100) valuation; and maintained an average

daily attendance of 15 or more pupils at each elementary school for which aid is sought. If a district receives this aid and then pays its teachers in excess of the amounts above specified it forfeits its right for any further such aid for a period of two years.

This condition applies to consolidated districts that have consolidated for high-school purposes but retain their one-teacher schools as elementary schools.

#### Comfortable Transportation Required.

**Nebraska.**—As in Iowa, Nebraska grants special State aid for consolidated schools maintaining suitable grounds, buildings, and equipment for teaching vocational subjects and employing teachers qualified to teach these subjects. In addition Nebraska adds to these requirements the comfortable transportation of pupils. Two-room schools receive \$100 for equipment and the further sum of \$150 annually; three-room schools receive \$150 toward equipment and \$200 annually; four or more room schools receive \$350 for equipment and \$300 annually.

**North Dakota.**—Consolidated schools meeting the requirements of State graded schools of the first class receive annually \$400 State aid; those meeting the requirements of State graded schools of the second class receive \$350; and those meeting requirements of State graded schools of the third class receive \$300. The law provides that if the tax rate in any district is at least 4 mills and less than 7, each school shall receive double the amount named. If it is 7 mills or more each school shall receive treble the amount.

#### Must Have at Least Three Teachers.

**Oklahoma.**—A consolidated district that has been formed for a term of six scholastic months; has employed at least three teachers; has had an actual attendance during the said term of not fewer than 130 pupils residing within the district; has furnished free transportation; and has constructed and furnished a suitable building of not fewer than three rooms receives from the State building fund an amount not to exceed one-half the cost of the building, provided that in no case shall any district receive a sum exceeding \$2,500.

A union graded district that has been formed for six scholastic months, has employed at least two teachers, has had an actual attendance during said term of not fewer than 40 pupils residing within the district, and has constructed a suitable building, receives from the State building fund an amount not to exceed one-half the cost of the building, pro-

vided that in no case shall any district receive a sum exceeding \$1,250.

A union graded-school district is a district providing for a central school in which instruction is given above the sixth grade, to and including the regular high-school course.

**Pennsylvania.**—In order to aid in the establishment of local or joint consolidated schools, the Commonwealth pays annually to local or joint consolidated school districts and unions of school districts maintaining such schools an amount equal to one-half the sum which has been expended during the previous school year by such a school district for transporting pupils to and from consolidated schools, provided that no district shall receive more than \$3,000 for any one year. This amount does not include sums paid for the repair of vehicles. The State also pays to each school district of the fourth class \$200 annually for each school permanently closed by consolidation.

#### For Each "Department," \$100.

**Rhode Island.**—When a town consolidates three or more ungraded schools, and establishes in lieu of these ungraded schools a graded school of two or more departments with an "average number belonging" of not less than 20 pupils for each department, the State pays to such a town \$100 annually for each department toward the support thereof. This \$100 may be applied to transportation.

**South Carolina.**—The "rural graded-school law" and the "centralized high-school law" have had great effect favorable to consolidation. Those laws are in substance as follows:

Not less than \$187,000 is appropriated annually by the State for assisting rural school districts in the establishment, maintenance, and equipment of rural graded schools. Schools with two teachers receive \$200 per year; those with three or more teachers under certain conditions, \$300 per year; those with four teachers, \$400 per year; and those with five teachers, \$500 per year. In order to participate in this aid local districts must meet certain legal conditions relating to tax levy, length of term, enrollment, average daily attendance, buildings, sanitation, classification, and course of study. In addition, the law specifically states that the school must be provided with the minimum equipment prescribed by the State board of education. The law further states that the school trustees may use this money for transportation.

Centralized high schools in South Carolina, which are established by the cooperation of three or more adjoining districts, none of which contains an incor-

porated town of 500 inhabitants, receive State aid. High schools with two teachers receive not more than \$900 annually; those with three teachers not more than \$1,150; and those with four or more teachers not more than \$1,400. In addition, an additional stipend of five dollars (\$5) per month is granted to teachers in these schools who return for a second year's service, and a further additional stipend of five dollars (\$5) per month for a third year's service. The apportionment to a centralized high school may be doubled at the discretion of the State board of education. In order to receive this aid there must be at least two teachers in the high-school department, an enrollment of at least 25 high-school pupils, and the local district must levy the tax specified by law and open its high school free to the pupils of the district.

#### Aid According to Classification.

**South Dakota.**—First-class State consolidated schools receive \$400 State aid annually; second-class State consolidated schools receive \$250; and State consolidated high schools \$600. In order to receive this aid districts must comply with certain legal conditions regarding the size of the district, transportation of pupils, length of term, type of building, equipment, number of teachers, and course of study.

**Tennessee.**—One hundred thousand dollars (\$100,000), or such a part thereof as may be necessary, is set aside annually from the State school fund for the purpose of encouraging and aiding consolidation and the supervision of teaching. This is distributed at the discretion of the State board of education.

**Texas.**—Special State aid is granted from the rural-aid fund for the transportation of pupils to and from consolidated schools. The amount given by the State to each school equals one-half the amount spent for this purpose. The State department of education is authority for the statement that no school receives more than \$500.

#### Payment for Transportation and Board.

**Vermont.**—One hundred thousand dollars (\$100,000) of the State school fund is set aside for the transportation and board of pupils. The law specifically authorizes consolidation, and the fund for transportation and board encourages consolidation.

**West Virginia.**—Standard consolidated schools in West Virginia are classified as first and second class. First-class consolidated schools receive State aid from the general school fund to the amount of four dollars (\$4) per pupil, based on average daily attendance, but the total amount per school shall not exceed \$800



for any one year. Second-class consolidated schools receive three dollars (\$3) per pupil, based on average daily attendance, but the total amount per school shall not exceed \$600 for any one year.

**Wisconsin.**—This State encourages consolidated schools through special appropriations for buildings and equipment, transportation of pupils, and instruction in high schools located in consolidated districts, as follows:

#### Favors Consolidation Embracing Township.

There is appropriated annually from the general fund of the State a sum not to exceed \$10,000 for special State aid to partially defray the cost of erecting and equipping a school building in each consolidated school district formed by uniting the schools of two or more districts. Of this amount there is allotted to each such consolidated district one-half the cost of erecting and equipping its school building, but not to exceed \$1,000 for a school of one department; \$1,500 for a graded school or two departments; \$2,000 for a graded school of three departments; \$3,000 for a graded school of four or more departments in a consolidated district formed by uniting the schools of three or more districts; or \$5,000 for a graded and high school in a consolidated district formed by uniting the schools of all the districts of a township.

Consolidated free high schools may receive State funds not to exceed one-half the amount expended for instruction in such schools. The amount paid by the State for any one school varies from \$900 to \$1,500, depending upon the number of teachers employed. No such State aid shall be apportioned to a high school after it has been in operation for four years unless the average daily attendance for the year is at least 15 pupils.

The school board in any consolidated district must provide transportation to and from such consolidated school for the entire school year for all children between the ages of 6 and 16 in the district who reside more than 2 miles from the consolidated school. The State reimburses the district for such transportation at the rate of from 10 to 20 cents per day for each pupil, depending upon the distance traveled.

#### Summary.

It is evident that the laws specifically make it clear that districts receiving State aid must put forth considerable local effort in order to qualify for the aid. This means that they must provide a reasonably good school to start with. The conditions imposed upon the districts relate in general to the length of term,

## CHIEF STATE SCHOOL OFFICERS.

[Those marked with an asterisk (\*) were recently chosen. Some of them have not yet entered on duty.]

State.	Name.	Title.	City.
Alabama.....	John W. Abercrombie.....	State superintendent of education.....	Montgomery.
Alaska.....	Lester D. Henderson.....	Commissioner of education.....	Juneau.
Arizona.....	*C. O. Case.....	State superintendent of public instruction.	Phoenix.
Arkansas.....	*A. B. Hill.....	State superintendent of public instruction.	Little Rock.
California.....	Will C. Wood.....	State superintendent of public instruction.	Sacramento.
Canal Zone.....	W. W. Andrew.....	Superintendent of schools.....	Balboa Heights.
Colorado.....	*Mrs. Mary C. C. Bradford.....	State superintendent of public instruction.	Denver.
Connecticut.....	A. B. Meredith.....	Commissioner of education.....	Hartford.
Delaware.....	H. V. Holloway.....	State superintendent of public instruction.	Dover.
District of Columbia.....	F. W. Ballou.....	Superintendent of schools.....	Washington.
Florida.....	W. S. Cawthon.....	State superintendent of public instruction.	Tallahassee.
Georgia.....	*N. M. Ballard.....	State superintendent of schools.....	Atlanta.
Hawaii.....	Vaughan MacCaighey.....	Superintendent of public instruction.	Honolulu.
Idaho.....	*Miss Elizabeth Russum.....	State superintendent of public instruction.	Boise.
Illinois.....	Francis G. Blair.....	State superintendent of public instruction.	Springfield.
Indiana.....	Benjamin J. Burris.....	State superintendent of public instruction.	Indianapolis.
Iowa.....	*Miss May E. Francis.....	Superintendent of public instruction.	Des Moines.
Kansas.....	*J. W. Milley.....	State superintendent of public instruction.	Topeka.
Kentucky.....	George W. Colvin.....	State superintendent of public instruction.	Frankfort.
Louisiana.....	T. H. Harris.....	State superintendent of education.....	Baton Rouge.
Maine.....	Augustus O. Thomas.....	State superintendent of public schools.	Augusta.
Maryland.....	Albert S. Cook.....	State superintendent of schools.....	Baltimore.
Massachusetts.....	Payson Smith.....	Commissioner of education.....	Boston.
Michigan.....	Thomas E. Johnson.....	Superintendent of public instruction.	Lansing.
Minnesota.....	J. M. McConnell.....	Commissioner of education.....	St. Paul.
Mississippi.....	W. F. Bond.....	State superintendent of public education.	Jackson.
Missouri.....	*Charles A. Lee.....	State superintendent of public schools.	Jefferson City.
Montana.....	Miss May Trumper.....	State superintendent of public instruction.	Helena.
Nebraska.....	John M. Matzen.....	State superintendent of public instruction.	Lincoln.
Nevada.....	W. J. Hunting.....	State superintendent of public instruction.	Carson City.
New Hampshire.....	E. W. Butterfield.....	Commissioner of education.....	Concord.
New Jersey.....	John Enright.....	State commissioner of education.....	Trenton.
New Mexico.....	*Miss Isabel Eekles.....	State superintendent of public instruction.	Santa Fe.
New York.....	Frank P. Graves.....	State commissioner of education.....	Albany.
North Carolina.....	E. C. Brooks.....	State superintendent of public instruction.	Raleigh.
North Dakota.....	Miss Minnie Nielson.....	State superintendent of public instruction.	Bismarck.
Ohio.....	Vernon M. Riegel.....	Director of education.....	Columbus.
Oklahoma.....	*M. A. Nash.....	State superintendent of public instruction.	Oklahoma City.
Oregon.....	J. A. Churchill.....	State superintendent of public instruction.	Salem.
Pennsylvania.....	T. E. Finegan.....	Superintendent of public instruction.	Harrisburg.
Philippine Islands.....	Luther B. Bewley.....	Director of education.....	Manila.
Porto Rico.....	Juan B. Huyke.....	Commissioner of education.....	San Juan.
Rhode Island.....	Walter E. Ranger.....	Commissioner of education.....	Providence.
South Carolina.....	*J. H. Hope.....	State superintendent of education.....	Columbia.
South Dakota.....	Fred L. Shaw.....	State superintendent of public instruction.	Pierre.
Tennessee.....	J. B. Brown.....	State superintendent of public instruction.	Nashville.
Texas.....	*S. M. N. Marrs.....	State superintendent of public instruction.	Austin.
Utah.....	C. N. Jensen.....	State superintendent of public instruction.	Salt Lake City.
Vermont.....	Clarence H. Dempsey.....	Commissioner of education.....	Montpelier.
Virginia.....	Harris Hart.....	State superintendent of public instruction.	Richmond.
Washington.....	Mrs. Josephine C. Preston.....	State superintendent of public instruction.	Olympia.
West Virginia.....	George M. Ford.....	State superintendent of schools.....	Charleston.
Wisconsin.....	John C. Callahan.....	State superintendent of public schools.	Madison.
Wyoming.....	Mrs. Katherine A. Morton.....	State superintendent of public instruction.	Cheyenne.

building, equipment, qualifications of teachers, and local tax levy.

The laws of 15 of the 19 States designate how all or a part of the money paid by the State to the district shall be expended. In some of these 15 States the statutes specify that it shall be spent for more than one item. A summarization of these items shows that in 9 instances it must be spent for transportation, in 5 for buildings, in 4 for instruction and in 2 for the maintenance of industrial courses.

## LOS ANGELES TEACHERS ORGANIZE RESEARCH COUNCIL.

Scientific research to improve instruction is the aim of the High-School Research Council of Los Angeles, which has attracted 200 educators of the city, including junior and senior high-school principals and teachers, as well as psychologists and other persons interested in educational research. The council meets twice a month for scientific discussion of educational problems.

## EFFECTIVE SURVEY OF OHIO COUNTY

**Local Superintendents of Logan County Conduct Survey Under Direction of University Professor—State Bureaus Give Assistance—Tests Will Be Continued.**

By C. C. McCracken, *Professor of School Administration, Ohio State University.*

A thorough survey of Logan County, Ohio, and of the city of Bellefontaine, was conducted by County Superintendent D. H. Sellers and R. J. Kiefer, superintendent of schools in Bellefontaine, under the direction of the writer. During the school year 1921-22 the survey started as a minor study suggested by Dr. McCracken, but was gradually extended as the school people and the patrons became aware of the possibilities of such careful and cooperative study.

### City Asks to be Included.

At first, a graduate student in school administration acting as superintendent of one of the villages of the county was asked to make an age-grade census of the county as an ad interim project. Within a few weeks those in charge of the survey succeeded in interesting the State bureau of juvenile research, then under Doctor Goddard, in conducting a mental survey of the entire county. This bureau placed an efficient assistant in charge and he personally gave or supervised the giving of tests to all children in the county school district without cost to the county, except for local transportation. At this point, the city of Bellefontaine, which is not a part of the county school district, asked to be included, a request which was gladly granted. Many individual tests were given by the assistant, Mr. R. P. Rauch, and as a result a large number of the exceptional children have since been tested individually by competent testers.

Immediately following the mental testing came the desire for educational tests for checking against the mental. A thoroughly trained man in this field was sent to the county to acquaint the local superintendents, principals, and teachers with the routine of giving such tests. The Woody-McCall mixed fundamentals, the Monroe reading, rate, and comprehension, and the Ashbaugh spelling tests were given.

The results from these tests were tabulated and put into graphic form by

graduate students in school administration.

To aid in further diagnosis of conditions affecting the pupils of the schools, forms were prepared to secure data regarding preparation, experience, tenure in present position, and professional reading and activities of teachers. These data brought sharply to the attention of the school authorities the need of greater preparation and of sufficient inducements to keep a teacher in service in a particular position for a longer time. Fifty-one and five-tenths per cent of the teachers in the county have had only one year of training beyond the high school, while this was true of 25.4 per cent of the teachers in the city. In the matter of certification, 41.3 per cent of the teachers in the county and 20 per cent in the city held one-year certificates, only three of which may ever be granted to a teacher in Ohio. On the other hand, 21.5 per cent of the teachers in the county and 63.7 per cent in the city held either life certificates or provisional certificates which will lead to life certification after 24 months' teaching experience. In regard to tenure in present position, 44.2 per cent of the county teachers and 41.8 per cent of the city reported 1921-22 as the first year in their present positions. The percentage who had spent more than four years in their present positions was practically negligible, while only 28 per cent in the county and 38.2 per cent in the city had held their present positions more than two years.

### Health Betterment Program Introduced.

Other phases which have developed are studies of the compulsory attendance, school finances, extra-curricular activities, and health of pupils. Each of these has brought out many notable facts which have been reflected in the administration of the schools. Particularly, the county and city health authorities have introduced a program of health betterment and protection that is rapidly reaching each pupil.

Another interesting fact which has developed is that centralization and consolidation of schools in this county have advanced in a most peculiar manner. The highest point in Ohio lies almost at the geographical center of the county. East of a line drawn north and south through this point, the land is exceedingly rough, the roads being very hilly and not in good condition during the winter months. West of this line the county is nearly level and the roads and facilities for travel are good. In the east half the land is neither so fertile nor so valuable, while the west half is a rich agricultural region. In spite of these topographical and economic conditions

the east half of the county is almost entirely centralized, while in the west half large noncentralized areas still remain. The tests, both mental and educational, indicated that better conditions were found corresponding to the length of time of centralization or of close supervision in the older villages. Consequently, the results of this survey are being used to further centralization of schools.

### Local Officers Made Survey.

Another noteworthy fact in this survey is that the teachers and school officials of the county and city have made the problem of investigation their own rather than that of an outsider. Nor does the interest stop there, for the patrons of the schools are almost as thoroughly interested. The attempt has been to put on a program that was not so large as to defeat the real purpose of investigation, but rather one that could be easily understood and utilized for the general betterment of schools.

During 1922-23 the movement is to continue. The bureau of juvenile research will again test all the children of the county and city at a given hour on a given day. Certain educational tests will be given and further investigation will be continued in the other lines started last year. The printed report of the study will of necessity contain a summary of the investigation conducted during 1921-22 only, but the real benefits will be derived during the years to come.

## NEW YORK LOANS SHOP LIBRARIES GRATUITOUSLY.

To meet the need for books in the various fields of vocational, part-time, and industrial education a traveling shop library has been prepared by the library extension division of the State of New York. The shop library is one of the collections of books which are lent by the library extension division to any place in New York State, preference being given to localities where it is difficult to provide good books for free circulation. Bookcases as far as they can be supplied are sent with the libraries.

Twenty-five books or fewer are sent to a school without any charge upon application of the school authorities, transportation being paid for by the State. For each additional 25 books a fee of 50 cents is charged. The books may be kept for a school year and then they may be renewed upon payment of a 50-cent fee. Certain books may be bought by the schools at half price, the other half being paid from the State library fund.



## WHAT IS A CONSOLIDATED SCHOOL?

**Difficult to Gather Accurate Data When Term Has Such Variety of Meanings—In One Sense Every Graded School is "Consolidated"—North Carolina Definition One of the Best.**

By J. F. ABEL, Assistant in Rural Education, Bureau of Education.

### Various Meanings of the Word "Consolidation."

What schools or districts may properly be classified under the term "consolidated"? There are many definitions of the term. Ten States have fixed its meaning by law, and it has been variously defined in numerous books and articles. Sometimes "consolidation" is used synonymously with "centralization." At other times each word is given a distinct meaning, and the difference between the two is clearly stated. There is no generally accepted usage of "consolidation," and while there are elements common to most of the definitions, they vary so much that it is extremely difficult to decide in many just what are consolidated schools and to gather accurate data on the subject.

The Bureau of Education recently collected 35 definitions of consolidation, consolidated schools, and consolidated school districts. These were taken from State laws and publications of State departments and State institutions with the intention of selecting only those that are in a sense official. They will be published verbatim in a rural-school leaflet, and a sketch of their general characteristics is given here.

### The Consolidated School.

The simplest of the definitions relates to the consolidated school and has but the one idea, that of uniting smaller schools to form larger ones. There are no qualifications as to the ultimate purpose of the union other than to form a larger school, nor as to the size of the resultant school, the number of grades and teachers in it, nor the area and taxable wealth of the territory it serves. Examples are to be found in the report of the Virginia Education Commission—"School consolidation, i. e., the maintenance of one larger school in place of two or more small schools"—and in *The Work of the Rural School*, by J. D. Eggleston and Robert Bruère—"The term 'consolidated school' is used to mean the merging of two or more schools into one central school." Similar definitions are in bulletins published in Missouri in 1911, Tennessee in 1912, and Mississippi in 1917.

In the same way consolidated school districts are sometimes considered to be nothing more than those formed by uniting two or more districts into one. There are two legal definitions of this kind. The law of Washington reads:

"Any school district which has been formed by the consolidation of two or more school districts shall be designated as a consolidated school district."

That of Wisconsin is:

"If a majority of those of each district voting at the election vote in favor of consolidating the district schools in their respective school districts, the territory included constitutes a consolidated rural school district."

This type of district is included also in a broader designation made in the laws of Idaho, and in a recent classification of consolidated districts in New York.

These one-idea definitions of the consolidated school and the consolidated school district leave out all the elements pertaining to school improvement. They imply a gain in the mere fact of uniting, a thing that does not necessarily follow. A list of all the consolidated schools in the United States made under such a classification would include most of the city schools, certainly those of the older cities and mere combinations of one-teacher schools to form larger one-teacher schools. If accurate, it would require a careful study of the history of every established school to determine whether it was at any time a merging of two or more schools. That would be an impossible and unprofitable task. The advocates of consolidation are striving neither for great city schools nor larger one-teacher schools. They have another ideal and do not willingly accept either of these as typical of it. If the term consolidation is to connote always a finer type of educational opportunity, it must mean something more than uniting smaller units into larger ones.

### Consolidation Not Dependent on Union.

Some of the definitions disregard the element of the union in the formation of the school or district. The Idaho law provides that "all school districts, whether they have been made up by uniting several districts or whether they

constitute one large district, maintaining a central school and also schools in other parts of the district, are hereby defined to be a consolidated school district."

The Department of Education of Louisiana in 1909 defined consolidation as meaning "simply the assembling of many children in one school instead of dividing the children among a number of schools." By the revised school laws of 1921 of Missouri, all school districts in that State "outside of incorporated cities, towns, and villages which are governed by six directors shall be known as consolidated school districts." Any town or city school district or any district having 200 or more census children elects six directors.

Legally, a consolidated school in North Dakota is "one where at least two teachers are employed and at least 18 contiguous sections are served." In Minnesota any existing school district having an area of 12 sections and meeting certain requirements may be granted the rights and privileges of a consolidated school district. In these States the size of the district or school rather than the manner of its formation is the determining factor.

### The Consolidated School a Better School.

The element of improved school facilities shown in the use of such words as "strong," "centralized," "graded," "better," "improved," "efficient," "larger," and "good" predominates in a majority of the definitions. The department of education in Alabama would form from small, weak, and poorly graded schools strong centralized schools, each properly located, housed, graded, and taught by several competent instructors. The University of North Carolina has set a similar standard for consolidated schools.

The proponents of consolidation in the State Agricultural College of Colorado include in their reports only those new schools formed by uniting districts or schools in a reorganization of the local school system as the result of an educational campaign for school improvement. They exclude some three or four hundred large schools located in the open country and in the small villages that were not formed in this way.

"A union of two or more school districts into one district for the purpose of having a better school," is the definition set by the superintendent of public instruction of Illinois. The law of Minnesota includes among consolidated districts those new ones formed by a union of districts or the annexation of one or more districts to an existing district that maintains State, graded, semigraded, or high schools.

The Central Missouri State Teachers' College adds to the element of union the

purpose "of having a better school for both elementary and high-school instruction." The recent survey of rural schools in New York includes in the types of consolidation those which have resulted in a much enlarged and much improved type of school and those maintaining a school of several teachers, usually with a high-school department.

A consolidated school in Pennsylvania is by law a public elementary school formed by uniting two or more public elementary schools that before the union were held in separate buildings and after the union are housed in one school plant and taught by two or more teachers. The University of Texas has included the maintenance of one larger school, with several teachers, at some point near the center of the area to be served as a part of its definition of consolidation.

The department of education in Washington has given the chief object of consolidation to be bringing the pupils of ungraded schools to a central point where a graded school may be maintained. The school law of West Virginia gives the district board of education authority "to consolidate two or more small schools into central graded schools to be known as consolidated schools." Any district in Wisconsin may unite its schools in a central State graded school, and after a central building is erected and the schools united the district is by law deemed a consolidated district.

The Department of Public Instruction of Nebraska in 1903 set the ideal to be "the discontinuance of the small schools within a given area, say a congressional township, and the maintenance of one graded school instead at some point near the center of the township." A special report made in 1919 by the State office defines a consolidated school as a well-graded school, under one board, in charge of two or more teachers, offering some high-school work and resulting from a union of two or more small schools.

One of the best expressions of the aim of consolidation is in a bulletin issued in 1911 by the superintendent of public instruction of North Carolina:

"The vital aim underlying the consolidation of the one-teacher schools and the public conveyance of pupils to an efficient central school is to give the country child educational advantages equal to those now enjoyed by the most favored city child in North Carolina. It is to provide for the country child a well-organized, well-equipped, and well-constructed country school, with children enough to make the work interesting and vital, with taxable property enough to make it financially efficient, with well-trained, experienced, and capable teachers to provide adequately for an effective

division of labor, insuring proper graduation and classification of pupils, insuring a larger number of daily recitations for each pupil, and with longer time for each recitation, making practicable an enriched course of study 'abounding with the spirit and strength of country life,' and making it practicable to place within easy reach of every child in the township efficient high-school advantages. \* \* \* Public transportation of pupils has come to be recognized as an indispensable adjunct to the most efficient type of rural school consolidation."

#### Definite Standards for Consolidation.

Besides indefinite statements that the consolidated school be an improved one, some classifications both in the laws on consolidation and the discussions of the subject set definite standards. District areas of 12 sections in Minnesota and of 18 in North Dakota have already been noted in another connection. The people who are promoting consolidation in Kansas interpret the term to mean "the joining of a number of school districts sufficient to give a valuation of at least \$2,000,000, thus assuring the maintenance of a good school without an excessive taxation; a school system of 12 grades, with adequate means of transportation for all children who walked the country roads, and a good school organization."

A consolidated school in Mississippi with a territory of 25 square miles or more may issue bonds for buildings or other permanent improvements, levy taxes for maintaining school as long as desired after the county public-school term is out, and may add a high-school department with free tuition. The consolidated district in Oklahoma maintains only one school; the district must have an area of at least 25 square miles and a taxable valuation of not less than \$200,000. An exception is made in the case of districts with a taxable valuation of \$500,000 or more. They may be formed with less than 25 square miles of area. The department of public instruction in Tennessee in 1912 interpreted the ideal consolidated school to be one with not less than four teachers and serving an area of from 20 to 30 square miles.

#### Meanings That Include or Imply Transportation.

While transportation of pupils at public expense is usually not included in the term "consolidation," in a few cases it is embodied as a part of the definition of the word and in others is indicated as desirable. The legal term "consolidation" in Colorado includes the conveyance of pupils to one consolidated school. The department of education in Mississippi applies the term "consoli-

dated school" only to those that use transportation.

The Oklahoma consolidated district must furnish transportation to all pupils living 2 or more miles from the school. The legal definition of "consolidation" in Idaho has the proviso that the board of trustees may provide conveyance for pupils living in distant and remote parts of the district. The standard set in Kansas and North Carolina, already quoted, make transportation a necessary adjunct of consolidation. In Tennessee and Texas facilities for transporting children to and from schools are deemed a part of the ideal consolidation.

#### Uses of "Consolidation" and "Centralization."

Some confusion arises in uses of the words "centralization" and "consolidation." The State law of Pennsylvania for 1901 defines centralization as "a system of schools in a township providing for the abolishment of all subdistricts and the conveyance of pupils to one or more central schools." In almost exactly the same sense the word is now applied in Ohio to uniting the schools of a rural district or those of a township in which there are two or more districts. Consolidation of schools in Ohio is brought about by suspending temporarily or permanently any school or district that had an average daily attendance for the preceding year of less than 10 pupils.

In Oklahoma centralization is used as the inclusive term for the formation of both consolidated school districts and union graded districts. A centralized school in Colorado is formed by uniting two or more schools already in the same district. A centralization in the latter State may be complete within the district or partial in the sense either of territory or grades. The school report of Vermont for 1910 defines centralization as "the combination of all schools, so far as possible, into one central plant," and consolidation as "the combination of one or more small schools into one good school."

#### The Need for a Standard Definition.

It would seem advisable for school men and women who are interested in bettering the schools by consolidation and centralization to agree upon a definition for each of these words and to set standards by which elementary, junior high, and senior high schools may come under these classifications. More definite aims could be established and better data for proving the great advantage of the larger school unit over the smaller unit could be obtained. It may even be possible, with the help of a more nearly uniform terminology, to determine in time the approximate size of the most effective school unit.



## NEW BOOKS IN EDUCATION

By JOHN D. WOLCOTT.

**GATES, ARTHUR I.** The psychology of reading and spelling, with special reference to disability. New York city, Teachers college, Columbia university, 1922. vii, 108 p. tables. 8°. (Teachers college, Columbia university. Contributions to education, no. 129.)

A study of methods of diagnosis and treatment for cases of disability or serious difficulty in reading or spelling among children otherwise competent and without discoverable physical defects.

**GILMAN, ISABEL AMBLER.** Alaska, the American northland. Yonkers-on-Hudson, N. Y., World book company, 1923. viii, 343 p. front., illus., maps. 12°. (Inter-American geographical readers.)

This volume is intended as a geographical reader for the intermediate grades. The narrative is in the form of a story of the adventures of a group of boys and girls and their elders during a journey from Seattle through the heart of Alaska and return. Among the institutions described are the native schools and reindeer service maintained in Alaska by the United States Bureau of education.

**KNIGHT, FREDERIC BUTTERFIELD.** Qualities related to success in teaching. New York city, Teachers college, Columbia university, 1922. x, 67 p. tables. 8°. (Teachers college, Columbia university. Contributions to education, no. 120.)

This thesis deals with the problems of isolating the significant and measurable qualities of effective teaching and the methods of measuring these qualities. The study is based on a rating of 153 high-school and elementary-school teachers which was obtained by having the teachers rate each other for teaching ability and other qualities.

**LYNCH, ELLA FRANCES.** Bookless lessons for the teacher-mother. New York, The Macmillan company, 1922. vii, 265 p. 12°.

Contains comprehensive directions for the fundamental training which the mother should give her child in the home before the time comes for him to attend school.

**MARVIN, CLOYD HECK.** Commercial education in secondary schools. New York, H. Holt and company, 1922. vii, 216 p. diagrs., tables. 12°.

Public secondary commercial education is now adjusting its work to meet current needs and is fixing new standards. This book undertakes to establish fundamental principles for the guidance of further progress in this subject. It defines and describes commercial education, discusses certain tendencies in its development, and studies the present status of commercial education in the public secondary schools. The con-

tent and organization of current curricula of secondary schools of commerce are analyzed, and principles of curriculum organization are established.

**MILLER, HARRY LLOYD.** Directing study; educating for mastery through creative thinking. New York [etc.] C. Scribner's sons [1922] ix, 377 p. diagrs. 12°.

The author suggests methods which are designed to teach pupils to use their minds in the original solution of problems. He regards the high-school age as most favorable for the development of this ability. The task of education, as he sees it, is the production of a people capable of thinking, and with a mental attitude which is tolerant, fearlessly honest, expectant of change, and creative.

**MOORE, ERNEST C., ed.** Minimum course of study. Reports of committees on minimum essentials in elementary education. New York, The Macmillan company, 1922. xv, 402 p. diagrs., tables. 12°.

Gives the findings of a series of committees, one dealing with each subject of the elementary curriculum, appointed to study and report upon methods of organizing and teaching these subjects, by a committee of school superintendents of nine cities of Southern California.

**NATIONAL CONFERENCE ON WORKERS' EDUCATION IN THE UNITED STATES.** 2d, New York, 1922. Workers education in the United States. Report of proceedings second National conference on workers' education in the United States. New York city, Workers' education bureau of America, 1922. 196 p. 8°. (Spencer Miller, jr., secretary, 465 West 23d street, New York)

Among the contributors of papers to this volume are Samuel Gompers, C. A. Beard, Albert Mansbridge, J. H. Maurer, Charles Stillman, Henry Linville, W. H. Kilpatrick, and Winthrop Talbot.

**PENNSYLVANIA. UNIVERSITY. SCHOOLMEN'S WEEK.** Ninth annual Schoolmen's week proceedings, April 20-22, 1922. Philadelphia, Press of the University of Pennsylvania, 1922. 346 p. 8°. (University of Pennsylvania bulletin, vol. xxiii, no. 1. September 23, 1922.) (Prof. Le Roy A. King, secretary, University of Pennsylvania.)

Among the noteworthy papers contained in this volume are the following: The use and abuse of intelligence testing, by F. P. Graves. Distribution of authority and responsibility among State, county, and local officers—the best plan for Pennsylvania, by T. E. Finegan. What is Intelli-

gence and who has it? by Lightner Witmer. Group intelligence tests: Their value and limitations, by A. S. Otis. Sources for public revenue and suggestions for readjustments of Pennsylvania's State tax system, by C. L. King. The community as a local unit of rural school administration, by G. A. Works. Current practice in junior high schools in the light of fundamental aims, by A. J. Jones.

**ROBINSON, SANFORD.** John Bascom, prophet. New York and London, G. P. Putnam's sons, 1922. xi, 53 p. front. (port.). 12°.

An expansion of an address delivered by the writer at the annual meeting of the Alumni Association of Williams College, held at Williamstown in commencement week, 1922, and devoted to the consideration of John Bascom's life and work. The book depicts the services of Doctor Bascom as a leader of progressive thought.

**WHEELER, OLIVE A.** Bergson and education. Manchester, University press; London, New York, etc., Longmans, Green & co., 1922. 5 p. l., 131 p. 12°. (Publications of the University of Manchester. Educational series, no. X.)

The writer says that educational thought is now in a state of transition; new ideas are being discussed, and consequently new methods of teaching and new forms of school government are being tried on every hand. These progressive movements may be related and unified by applying the principles of Bergson's philosophy, which this book aims to put into usable form for this purpose.

**WILLIAMS, JAMES MICKEL.** Principles of social psychology as developed in a study of economical and social conflict. New York, A. A. Knopf, 1922, xii, 450 p. 8°.

Social psychology is defined by the author as the science of the motives of people living in social relations. This treatise gives particular attention to the conflict of various interests in economic, political, professional, and social relations. Book VII of the volume is entitled The conflict of interests in educational relations, and includes academic relations and public education.

### JOURNEYS GIVE OPPORTUNITY FOR ACTIVE INSTRUCTION.

Educational trips to the seaside or the country lasting from one to two weeks are taken by groups of London school children in charge of teachers. These journeys are not intended as holidays nor as health-seeking trips for delicate children, but as opportunities for active educational work, on the general plan of the visits within the city to museums and art galleries. The expenses of these trips are paid for chiefly by the parents of the children who take part, but the London County Council contributes toward these expenses according to the home circumstances of the children. About 300 trips a year are taken, more than 10,000 children participating.

## IMPROVEMENT IN COLLEGE TEACHING.

(Continued from page 98.)

educational psychology and methods of teaching can be utilized. For instance, if the instructors have difficulty in remembering names and faces and if their students have trouble in memorizing the most important parts of the project, they can be trained not only through the material obtained in interviews but also by reference to the laws of learning as described by Thorndike and others and adapted by the authors of text books on the methods of teaching. This is essentially the project method of teaching education and psychology. The members of the seminar will be brought in contact with 8 or 10 books which they would probably not otherwise read. In these books they will be referred to specific principles and methods and when they get through they will have a practical acquaintance with much of the theory of psychology and methods of teaching.

### Department Head Should Conduct Seminar.

The question arises as to whether or not this seminar can be conducted by the head of the department. My opinion is that on the whole if it is possible to get a member of the department of education to conduct the seminar it is desirable to do so. He knows the literature from which to select and is able to direct the young instructor to it somewhat better than can the head of the department, unless she has had a great deal of training in education. If, however, it is not possible to find exactly the right kind of person who commands the confidence of your group then the head of the department of home economics, after consultation with the department of education can secure references and other material and carry on the course herself.

The seminar ought to be followed by specific "training on the job" by visiting the classrooms of the young instructors and sympathetically watching them teach and suggesting instructive methods of improvement. The art of teaching is learned most efficiently when training on the job is given. Indeed, every art is learned best in this way. For instance, in learning to be moral the mother and the pastor each has a part to play. The pastor on Sunday lays down the general principles and the mother during the week sees that they are applied. The pastor alone can not teach children to be honest. The daily contact of the mother is absolutely essential. She is able to say to the boy, "This is honest; that is

dishonest. You should do this; you should not do that." Without this supplementary assistance the pastor is powerless. In a similar way, the formal courses in home economics-teaching have a place. The weekly seminar brings the problems more nearly home to the young instructor, but the detailed criticism of specific methods actually used under the observation of the head of the department is necessary to make the training fully efficient.

### Bad Form to Visit Another's Classes.

Unfortunately, college "ethics" is a handicap. It is considered to be rather bad form for instructors to visit each other's classes. It is true that in every other occupation people like to visit each other and watch the methods. One farmer will visit another in the fields to study his methods and get his opinions. Business men in situations that are not highly competitive gain experience from each other. But for some reason it is not the thing to do in college classes.

However, in a small, friendly, and compact body like the home economics department where everybody knows everyone else, the ice can be easily broken. What is needed is some sort of faculty action which will encourage the visiting of classes for the purpose of learning how to improve and, in the case of the head of the department, for the purpose of watching the young instructors in order to praise and criticize.

A third method of attack may be developed. It is perfectly clear to me, as I stated yesterday and have frequently reiterated, that in many cases people who fail in teaching are unsuccessful less because of lack of information than because of lack of qualities of personality. It is true that sometimes instructors do not have enough information to perform their jobs properly, but it often happens that instructors with an abundance of information fail because they lack certain personal qualities. They may have no interest in students or they may be irritable. Low standards of efficiency, laziness, and lack of interest in teaching may be the causes of failure. Perhaps they do not know the name and understand the personality of each of their students or they may not be able to get along harmoniously with the students or with the faculty.

These personal qualities which are of great importance in teaching can be improved by instruction. The usual method is to leave the development of personality to chance. The instructor comes upon the teaching force either with good personality or without it. It may grow in strength as time goes on or it may de-

teriorate; but if the qualities of personality necessary for the teaching job in college are analyzed they can be spread before the young teacher who is just beginning. She can rate herself to see the qualities in which she is at average or below or above. Young teachers are very much interested in this. They are delighted to analyze themselves in order to find out what they are like. They are able to see the points in which they are strong and this will give them confidence. They are able also to discover their weak points and upon these one by one definite assignments can be given by the head of the department. These assignments can be just as definite as are those which are given in an assignment in chemistry or history. Let us take for example such a weakness as lack of confidence. This can be built up to a very considerable degree in the young and inexperienced teacher who is quaking in the presence of difficulties. She can be taught how to obtain quickly the quality of confidence by asking her to perform certain tasks which will develop confidence. Many of us are working at about 50 per cent of our efficiency at a time when we could be using 75 or 90 per cent if this quality were properly developed.

### To Cure Defects in Personality.

The best method of curing defects of personality is "training on the job." Through personal interview with older instructors who have developed these qualities in themselves methods can be obtained. The experience of the head of the department will yield methods and these can be given to the young instructor in the form in which they will be most efficient.

In summarizing this discussion I may state that there are at least five plans which may be followed in improving methods of college teaching. Formal courses with undergraduate or graduate credit may be given, intensive courses may be provided, once a week a seminar may be held for as long as is necessary, visits to classes may be made for the purpose of praising and improving the quality of instruction, and direct training may be given in the development of the personality of the instructor. The possibilities are great and the technique is not difficult. Time for giving this instruction may seem to be difficult to find but it is of so much importance that time must be found, either by the head of the department or by some other member of the faculty who has unusual ability in this direction. Since the chief business of a college is to teach students, no pains can wisely be spared in making the teaching as efficient as possible.



## NEW YORK'S FIRST PUBLIC HIGH SCHOOL

**Provincial Legislature Undertook to Maintain a School of Secondary Grade in 1732—Teacher Beset with Many Difficulties—Appropriations Cease in 1739.**

No other State has centralized the control of educational administration so much as New York. Grants of funds, salaries of teachers, subjects of the curriculum, are some of the phases of State supervision. Precedence for this jurisdiction may be traced as far back as 1732, when the first public high school was established. As its existence is generally unknown even to educators and historians, a brief description may be of interest.

About 1730 a movement for establishing a secondary school, supported entirely by the Government, was initiated by a number of New York inhabitants, including James Alexander, Stephen De Lancey, Adolph Philipse, and members of the Morris family. Together with the mayor, recorder, and aldermen of New York City, they petitioned the assembly of the Province in 1732 to establish a free public school within the Province. The legislature granted the request by setting aside two appropriations "to encourage a public school for teaching of Latin, Greek, and mathematics."

### Curriculum Determined by Legislative Act.

The rector of Trinity Church, together with the justices of the supreme court, the mayor, recorder, and aldermen, all composed the board to administer the affairs of the school, and were known as "visitors." The purpose and curriculum as determined by the legislative act indicate clearly that the aim was to establish a secondary school. According to the statute, "learning is not only a very great accomplishment but the properest means to attain knowledge, improve the mind, morality, and good manners, and to make men better, wiser, and more useful to their country, as well as to themselves." To secure these ends the course of study was to include Latin, Greek, and "all parts of mathematics;" "geometry, algebra, geography, navigation, and merchants' bookkeeping."

For schoolmaster the city government suggested Alexander Malcolm, who was accordingly appointed by the provincial legislature. The incumbent, notwith-

standing preparation received at the University of Aberdeen, had been unsuccessful in conducting a private school in the city; therefore the appointment as public schoolmaster was very acceptable to him. The lot of the public school teacher in New York City has improved considerably since Malcolm's day, as he then taught six days in the week, Sundays and holidays alone being excepted, and was expected to pay for the rent of the schoolroom out of his own salary.

The scholars were 20 in number, 10 from New York, 2 from Albany, and 1 each from the remaining counties. The mayor, recorder, and alderman selected the pupils of New York City from a number of applicants who were to be at least 14 years of age and were to have had previous instruction in reading and writing.

### Political Wrangles Disturbed Teacher.

Schoolmaster Malcolm experienced frequent difficulties. He had to devote considerable time to the teaching of reading and writing English before his charges were able to take up the study of a foreign language. Teaching the slow-minded was not the least of his troubles, for contemporary political wrangles added to his worries. In the controversy over the freedom of the press between John Peter Zenger and Governor Cosby, the corporation sided with the former, and seized every opportunity to demonstrate its hostility toward the latter. This partisan feeling was expressed in an order compelling Malcolm to accept as one of the scholars of the city, Master John, son of Zenger. Another difficulty was encountered in grading pupils, as there was no stated time for the admission of new scholars. In a public letter Malcolm complains of the disadvantage of "scholars dropping into a school at different and uncertain times; the consequence of which is that a teacher can take charge of but a very few since one or two in the same form or lesson take up as much time as a dozen." To remedy this situation he suggested that beginners be admitted only in February and August.

The matter of salary also gave Malcolm concern, for payment from the common council was often several months overdue. His income from the Province through a special fund was even more unsatisfactory. Though he was allowed 40 pounds annually from this source it proved very unreliable, and for a long time Malcolm failed to receive his full allowance. In fact, when the act establishing the school expired in 1737, the sum of 111£ 2s. 6d. remained unpaid to the schoolmaster. He therefore petitioned

the legislature to pay this deficiency. Thus we see the initiation of the practice of New York City school teachers appealing to the assembly for bettering their salaries. However, this early attempt met with failure, for the house coldly rejected the petition. In fact, the supporters of public education experienced difficulty in having the act for maintaining the school renewed by the legislature. Malcolm's income continued very uncertain and in April, 1739, he received his last payment from the city. In the following year Malcolm again sought from the assembly payment for the arrears in his salary and this time the house made tardy amends by allowing 111£ 2s. 6d. Strangely enough this plan of public education, conceived by the progressive minds of the day such as James Alexander (A. I.), was defeated by the apathy of the popular branch of the government, the Assembly itself. In Virginia Governor Berkeley expressed his opposition to popular education, but in New York, George Clarke, the chief executive of the Province, supported the movement and deplored the shortsighted policy of the assembly. However, this body would take no action and thus ended the attempt to establish a public high school in the latter English period.—George W. Edwards, assistant professor of banking, Columbia University, in *Bulletin of High Points*.

## HIGH-SCHOOL EDUCATION INCREASES EARNINGS.

High-school education gives boys and girls a better chance to earn their living, according to reports from vocational bureaus in New York City. The employment department of the Washington Irving High School states that high-school graduates are offered from \$2 to \$5 more than nonhigh-school graduates for clerical positions and others of that type. Many applicants for positions fail to get them because of lack of a high-school education. The central employment bureau of the Y. W. C. A. finds that virtually all of the positions paying as much as \$20 a week, which were denied to certain applicants, were denied because these applicants were not high-school graduates. The vocational service for juniors states that about 10 per cent of the positions available are not filled because the young people applying for them lack the necessary education and training. Graduates of commercial schools find that their training pays well, for the high school of commerce reports that after one year's work the average increase for graduates of commercial schools is from \$5 to \$10 a week.

## HIGH SCHOOL BUILDINGS AND GROUNDS

### Commission on Reorganization of Secondary Education Presents Excellent Report—School Plant Must Be Adapted to Local Needs—Must Consider Future Use.

Maximum safety, adequate and properly distributed lighting, and good ventilation must be the eternal watchwords in the building of schools, says the commission on the reorganization of secondary education, appointed by the National Education Association, in a report which has been published by the United States Bureau of Education as a bulletin entitled "High School Buildings and Grounds." Practical economy and architectural beauty must also be considered, and the development of successful secondary-school plants must be governed by adaptation to local needs and local educational policies, for school plants, like school curriculums, are indigenous and can not be successfully transplanted, says the report. A successful school plant in one community may prove to be an educational misfit in another. But there are certain universal principles applicable to all school buildings, and the commission believes that all communities may justly demand that their schools be in harmony with these principles.

#### Class Rooms on One Side of Corridor.

For safety, it is desirable to build the school on the "open plan," that is, with classrooms on only one side of a corridor and natural light on the other. This is more expensive than lining both sides of the corridor with classrooms, but a compromise between the two plans may be made. Fire-resistive construction, adequate number and proper location of stairways and exits, the elimination of basements, and the isolation of the mechanical plant are of the greatest importance to safety. Proper natural lighting of classrooms is carefully considered in the report.

To conserve school-building resources, planning must be based upon an understanding of use, not only in the present, but also in the future, when changes in the school's activities will require changes and expansions in the school plant. A building plan to be truly efficient and economical must be elastic in the highest degree. A well-developed

plan reduces noninstructional space, such as corridors, stairways, offices, and rest rooms, to a minimum. The two-story plan is more economical than the one-story, in the opinion of the commission, because it presents fewer problems, but one-story buildings for small high schools are justified in climates where light construction is sufficient.

#### First Consideration for Health Provisions.

In planning the building, health provisions should receive first consideration, and the report takes up such arrangements as gymnasiums, playgrounds, swimming pools, and showers. The commission has studied the requirements for classrooms, laboratories, libraries, public speaking and music rooms, workshops, commercial rooms, home-economics rooms, lunch rooms, and noninstructional space, and has made recommendations for economical and efficient planning. Arrangements for the mechanical plant, including the boiler room, storage space for fuel and ashes, room for heating and ventilating apparatus, water heaters, and the necessary steam accessories, as well as artificial lighting, clocks, bells, fire alarms, telephone, vacuum cleaners, and motion-picture machines, are carefully taken up in this bulletin.

Problems in building a small high school and in planning annexes and other alterations on an old school are discussed, and a solution is given for a common problem in alteration. Floor plans are given to illustrate the problem and its solution. In giving this example, the commission remarks that every such problem must necessarily be an individual one, and that every solution is but a series of compromises.

### PRINCIPAL ARTICLES IN THIS NUMBER.

Objectives in Elementary Rural-School Agriculture, Eustace E. Windes.

Improvement in methods of College Teaching, W. W. Charters.  
Lessons on the Centralization Movement from Oklahoma, Katherine M. Cook.

Stockholm Training College for Vocational Teachers, P. H. Pearson.

Laws which Encourage Consolidation by State Aid, Edith A. Lathrop.

Effective Survey of Ohio County, C. C. McCracken.

What is a Consolidated School? J. F. Abel.

## ASSISTANCE TO AUSTRIAN INTELLECTUALS

### Commission of League of Nations Makes Appeal for Help in Order to Ward Off Disappearance of High Culture in Highly Civilized Country.

From report of JOSEPH C. GREW, *American Minister, Berne, Switzerland.*

The commission on Intellectual cooperation of the League of Nations has just addressed an appeal to the universities, academies, and institutions of learning of all countries in favor of Austrian intellectual workers and intellectual life in Austria.

This appeal is the result of a resolution taken by the commission at its first meeting, on August 1, 1922. The Council of the League of Nations, in its meeting of October 5, requested the commission to address an appeal to the universities and institutions of learning, inviting them to organize, as soon as possible, the relief work in favor of Austrian intellectuals, in order to ward off the disappearance of high culture in one of the most civilized countries of Europe.

The commission specified in this appeal some of the means which appear to it to be proper to remedy the situation, namely: Money remittances destined to support the institutions; exchange of professors and speakers, etc.

The appeal concludes by saying that any assistance to the "Austrian workers" constitutes an efficacious and practical act of intellectual cooperation.

### MICHIGAN MOVES TO EQUALIZE TAXATION.

To gain equality of opportunity for Michigan school children, Superintendent of Public Instruction Thomas E. Johnson urges that the tax rate for school maintenance be adjusted so that it will be practically uniform throughout the State. It is stated that some districts pay in school taxes more than \$30 per \$1,000 of assessed valuation and many pay more than \$20. The average for the State is about \$7.70. It is hoped that more State aid will remedy this condition, and that this can be gained through some other form of tax, through provision for keeping the primary-school fund more than \$10 per capita, and through the development of the district consolidation program.